



42A14SW0206 2.3696 CARNEGIE

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MINING LANDS SECTION

MAX MIN II EM AND MAGNETIC SURVEY
OF
ROSARIO, ABITIBI-PRICE CLAIMS
CARNEGIE TWP.

by

R.S. Middleton

Rosario Resources Canada Ltd.
P. O. Box 1367, Timmins, Ontario.

Volume II
December 31, 1980



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Sheet 4	Total Field Magnetics		1"= 200 ft
Sheet 5	Total Field Magnetics		1"= 200 ft
Sheet 3	Max Min II	1777 Hz	1"= 200 ft
Sheet 3	Max Min II	888 Hz	1"= 200 ft
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Sheet 4	Max Min II	888 Hz	1"= 200 ft
Sheet 4	Max Min II	444 Hz	1"= 200 ft
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Sheet 5	Max Min II	888 Hz	1"= 200 ft
Sheet 5	Max Min II	444 Hz	1"= 200 ft

INTRODUCTION

Purpose of Survey

A systematic Max Min II EM and magnetic survey was carried out over staked claims held by Rosario and patented land held by Abitibi-Price for the purpose of exploring for base metal massive sulphides and for delineating graphitic and ultramafic marker horizons. The area covered by this report is an extension of work carried out in lots 2-6 (sheets 1&2 in Vol. 1).

Location and Access

The area covered by this report is located in western Carnegie Twp. 20 miles north of downtown Timmins and is accessible by road via Highway 655 and the Camp 40 road(see map).

Property

The unpatented claims covered by the survey are held by Rosario Resources Canada Ltd.. These are:

<u>Claim Nos.</u>	<u>EM</u>	<u>Magnetometer</u>
P. 550890	40 days	20 days
P. 550891	40 days	20 days
P. 550892	40 days	20 days
P. 550893	40 days	20 days
P. 550894	40 days	20 days
P. 550895	40 days	20 days
P. 550896	40 days	20 days
P. 550897	40 days	20 days
P. 550898	40 days	20 days
P. 550899	40 days	20 days
P. 550900	40 days	20 days
P. 550901	40 days	20 days
P. 550886		
P. 550887	to be covered	
P. 550888		
P. 550889		

Previous Work

Drilling in lot 12, Con IV S $\frac{1}{2}$ was completed (Timmins file T 1098 Abel, E.) to test a conductor. Ultramafics are reported in the hole. Inco completed 3 holes on an Abitibi half lot in lot 11 to the east of the Rosario staked claims.

There is no previous work reported for lot 12, con 6, N $\frac{1}{2}$.

However the Keevil mining group report air borne and ground EM and magnetometer surveys for lot 9 con V S $\frac{1}{2}$. (Timmins file T-1309)

The west edge of the survey area (lot 12) was covered by an Input survey for Mattagami L. in 1970 (Timmins file T617). The complete Carnegie area has also been covered by at least 3 Input surveys prior to 1980 and new surveys were flown for parties unknown in 1980.

Survey Procedure and Instrumentation

The EM survey was carried out using a Max Min II unit manufactured in 1980 by Apex Parametrics of Toronto. A 600 foot cable (coil separation) was used for the horizontal loop moving coil configuration. Three frequencies were observed (ie.) 1777 Hz, 888 Hz, and 444 Hz.

Lines at 200 foot and 400 foot spacing were read with stations at 100 foot intervals. Profiles of the inphase and out-of-phase data are plotted at 1" = 20% on maps at the back of this report. The EM and magnetic surveys was carried out in July and August 1980.

The magnetic survey was done using a Geometrics total field magnetometer. Contoured maps at 50 gamma intervals are given at the back of this report.

Base lines and tie lines were read by looping back to a base station. The main base station for the whole grid including all 5 sheets is located at 99W on 2640 N near the Camp 40 Road (value 59538 grammas). Due to severe magnetic storms a base station recording system was established using a Barringer GM 122 connected to a Canadian Mining Geophysics (Ottawa) base station recorder. Readings were recorded every 2 minutes on paper tape.

The instrument work was done by Geoex Ltd. from Timmins, Ontario.

The drafting was done by Ben Brzuskwiewicz , assisted by personal from Geoex Ltd. in Timmins and base maps were prepared from survey plans by Wagih Youssef of Rosario.

Statistics

Approximately 4.5 miles of line were cut in each of the 3 half lots covered by the survey (lots 8 and 12) for a total of 13.5 miles.

Max Min II EM readings were observed at 477 stations and magnetometer readings were observed at 724 stations in lots 8 and 12.

INTERPRETATION

Magnetics

An anomalous magnetic trend at 4CN to 52 N on lines 120 W to 144 W is an extension of a series of magnetic highs on sheet 2 which may reflect a belt of iron rich thoeilites and, or ultramafic rocks. A possible north trending fault in the vicinity of 144 W - 148 W, possibly displaces this magnetic trend. Anomalous values at 72 N, 184 W may reflect the northwestern extension of this belt.

A magnetic anomaly originating on 176 W, 30 N extends northwesterly and is possibly associated with ultramafics. The north edge of this trend if it is an ultramafic, should be explored for base metals and gold. The anomaly continues across lot 10 and then swings through the northwest corner of lot 10.

A possible diabase dike is reflected in a north trending weak magnetic feature on 252 W, 88 N that extends to 264 W, 116 N on sheet 5.

A magnetic anomaly on TL131 +80N, 240 W to 252 W may reflect the continuation of magnetic anomalies on sheets 3 and 2 which could indicate an iron thoeilite trend or an ultramafic unit.

Max Min II -sheet 3

A long graphitic conductor extends across lots 9 and 10, Con 1V S $\frac{1}{2}$ and can be seen reflected in 444Hz data between lines 172 W to 196 W and is possibly displaced by a north trending fault in the vicinity of L 168 W. The eastern extent of this conductor may occur at 38N on L 160 W or 29 N on 160 W. The western extent of this conductor can be seen on 1777 Hz data and the conductor may split into two portions.

A possible conductor may occur at 29 N on L160 W. An Inco hole # 27052 in this vicinity drilled southwest intersected graphite. It is also possible this conductor is the fault off set of the long conductor described above.

Conductor trends can also be seen on lines 132 W, 136 W that extend east to sheet 2.

A possible weak conductor occurs on lines 176 W, 53 N, L200 W, 93 N, and L200 W, 80 N. These conductors would have to be verified with IP or vertical loop before any drilling could be recommended.

Max Min II- sheet 4

c)
A long highly conductive horizon extends beyond the west boundary of Carnegie at 50 N on 264 W which has been tested in 1980 by Gulf Minerals in Reid Twp. and by Inco (hole # 27030 and 27035) in 1966 in lot 11 and lot 12 (Abel file T-1098). This horizon is mainly graphitic and probably extends east through lot 11 as is evident by a conductor at 216 W / 35 N. Coupling with overburden can be seen on the quadrature profiles (ie.) positive increases in out of phase over conductor.

A second conductive horizon due to graphite is associated with a weak conductor outlined on L204W/42 N on 888 Hz and extending north west to 51 N on 220 W where it has been tested by a drill hole (Inco #27025) near line 220 W 50 N. This conductor parallels a magnetic high possible ultramafic or iron thoeelite that occurs to the north of the conductor.

A short conductor occurs on L244 W / 28 N that has not been properly covered to the east. This conductor is probably isolated (as evident from some private airborne EM date) and therefore would be a base metal target.

Max Min-sheet 5

One possible conductor occurs at 125 N on 256 W which should be verified with IP or vertical loop.

An overburden ridge at 173 N on 238 W may give rise to the apparent conductors to the north and south of this point.

Conclusions and Recommendations

Further drilling of a conductor in lot 12 (ie.) 244 W/43 N and testing of a conductor at 28 N on 244 W is recommended. Assume a depth of overburden of 150 feet for this area. Both conductors are roughly vertical, however the northern conductor of these two may dip steeply north. Drill the conductor from north to south in the first case to reach an ultramafic flow marker horizon that occurs in the area.

Holes recommended for lot 12 con IV are:

Collar Coordinates		Dip	Az	Casing	Depth
Easting	Northing				
L 244 W	27 N	-50°	N	200'	500
L 244 W	48 N	-50°	N	200'	500 +

Overburden drilling is recommended to check certain horizons for gold and base metal mineralization. One row of holes should be drilled along 2640 N tie line between lots 7 and the Reid Twp. line and a second row along Base line 0 and south of a long graphitic conductor starting in the west edge of the Esker in lot 4 and continuing west to the lot 6-7 boundary (and north of Jocko Creek).

Respectfully submitted,



R.S. Middleton
Exploration Manager

RSM/ma



Ministry of Nature

GEOPHYSICAL - GEOLOGIC
TECHNICAL DATA



42A145W0296 2.3696 CARNEGIE

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TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

MINING LANDS SECTION

Type of Survey(s) Mox Min ITEM + Magnetometer
Township or Area Carnegie
Claim Holder(s) Rosario Resources Canada Ltd.
P.O. Box 1367 TIMMINS P4N 2N7
Survey Company Rosario Resources - Geox
Author of Report R.S. Middleton
Address of Author P.O. Box 1367 TIMMINS
Covering Dates of Survey August - October / 80
(linecutting to office)
Total Miles of Line Cut 13.5

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)	EM
P. 550 890	✓	✓
P. 550 891	✓	✓
P. 550 892	✓	✓
P. 550 893	✓	✓
P. 550 894	✓	✓
P. 550 895	✓	✓
P. 550 896	✓	✓
P. 550 897	✓	✓
P. 550 898	✓	✓
P. 550 899	✓	✓
P. 550 900	✓	✓
P. 550 901	✓	✓

If space insufficient, attach list

SPECIAL PROVISIONS
CREDITS REQUESTED

DAYS
per claim

ENTER 40 days (includes
line cutting) for first
survey.

ENTER 20 days for each
additional survey using
same grid.

- Geophysical
 - Electromagnetic 40
 - Magnetometer 20
 - Radiometric _____
 - Other _____
- Geological _____
- Geochemical _____

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: Dec 31 / 80 SIGNATURE: R. Middleton
Author of Report or Agent

Res. Geol. _____ Qualifications 2, 706

Previous Surveys

File No.	Type	Date	Claim Holder

TOTAL CLAIMS 12

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS - If more than one survey, specify data for each type of survey

Number of Stations 477 Max Min / 724 magnetometer Number of Readings Max Min 477 x 3 724 magnetometers
Station interval 100' Line spacing 400'
Profile scale 1" = 20% Max Min
Contour interval 50' Magnetics

MAGNETIC

Instrument Geometrics
Accuracy - Scale constant 1%
Diurnal correction method Base sta check on TL + BL and Base Sta. Recorder
Base Station check-in interval (hours) 1 hour
Base Station location and value 99W, 2640N = 59538'

ELECTROMAGNETIC

Instrument Max Min II
Coil configuration Horizontal Loop
Coil separation 600 ft
Accuracy 1/2%
Method: [] Fixed transmitter [] Shoot back [x] In line [] Parallel line
Frequency 1777 Hz, 888 Hz, 444 Hz (specify V.L.F. station)
Parameters measured In phase and Out of Phase

GRAVITY

Instrument
Scale constant
Corrections made
Base station value and location
Elevation accuracy

INDUCED POLARIZATION RESISTIVITY

Instrument
Method [] Time Domain [] Frequency Domain
Parameters - On time Frequency
- Off time Range
- Delay time
- Integration time
Power
Electrode array
Electrode spacing
Type of electrode

CARNEGIE

DISTRICT OF
COCHRANE

PORCUPINE
MINING DIVISION

SCALE: 1-INCH=40 CHAINS

LEGEND

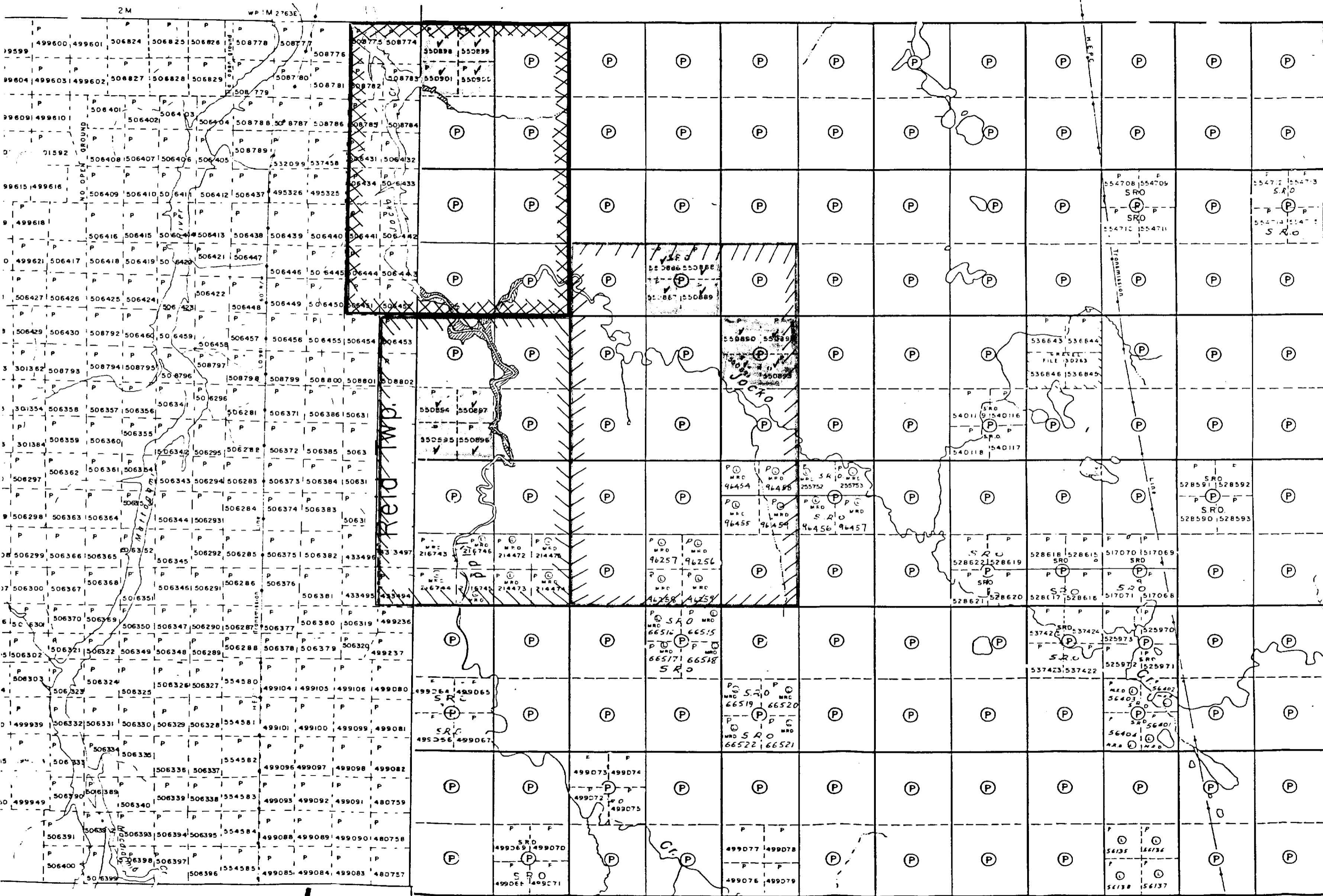
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- CROWN LAND SALE (CS)
- LEASES (L)
- LOCATED LAND Loc
- LICENSE OF OCCUPATION L.O
- ROADS
- IMPROVED ROADS
- RAILWAYS
- POWER LINES
- MARSH OR MUSKEG

NOTES

- L.O.1344 shown thus:
- 400' Surface rights reservation around all lakes and rivers

INDEX MAP

- Rosario Allerston Options
- Abitibi-Price Options
- Sheet 3 Sheet 4 Sheet 5



VI

V

IV

III

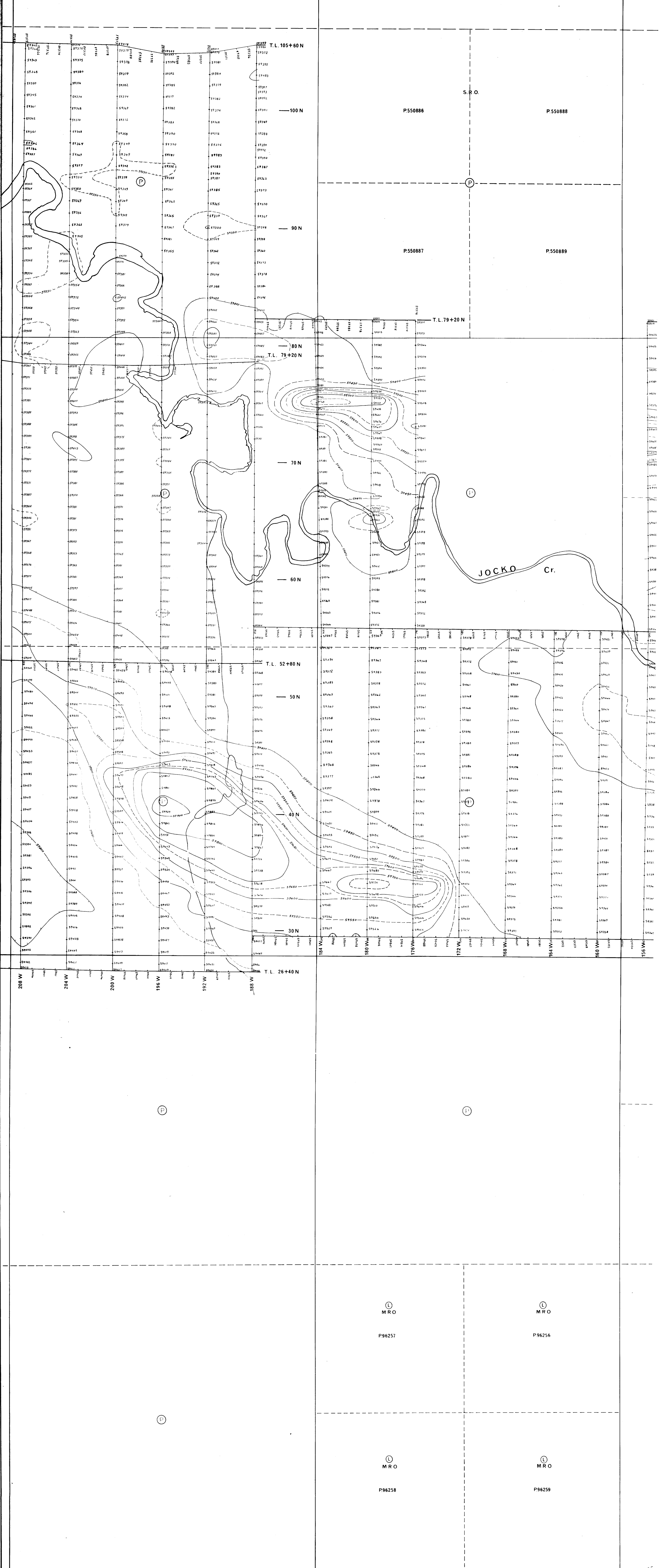
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I

Prosser Twp.

12 11 10 9 8 7 6 5 4 3 2 1



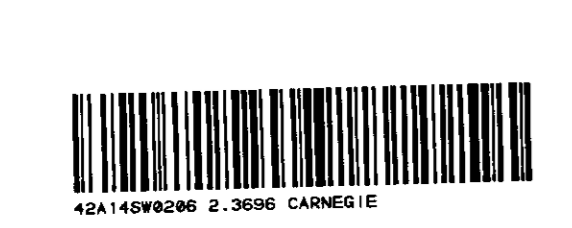


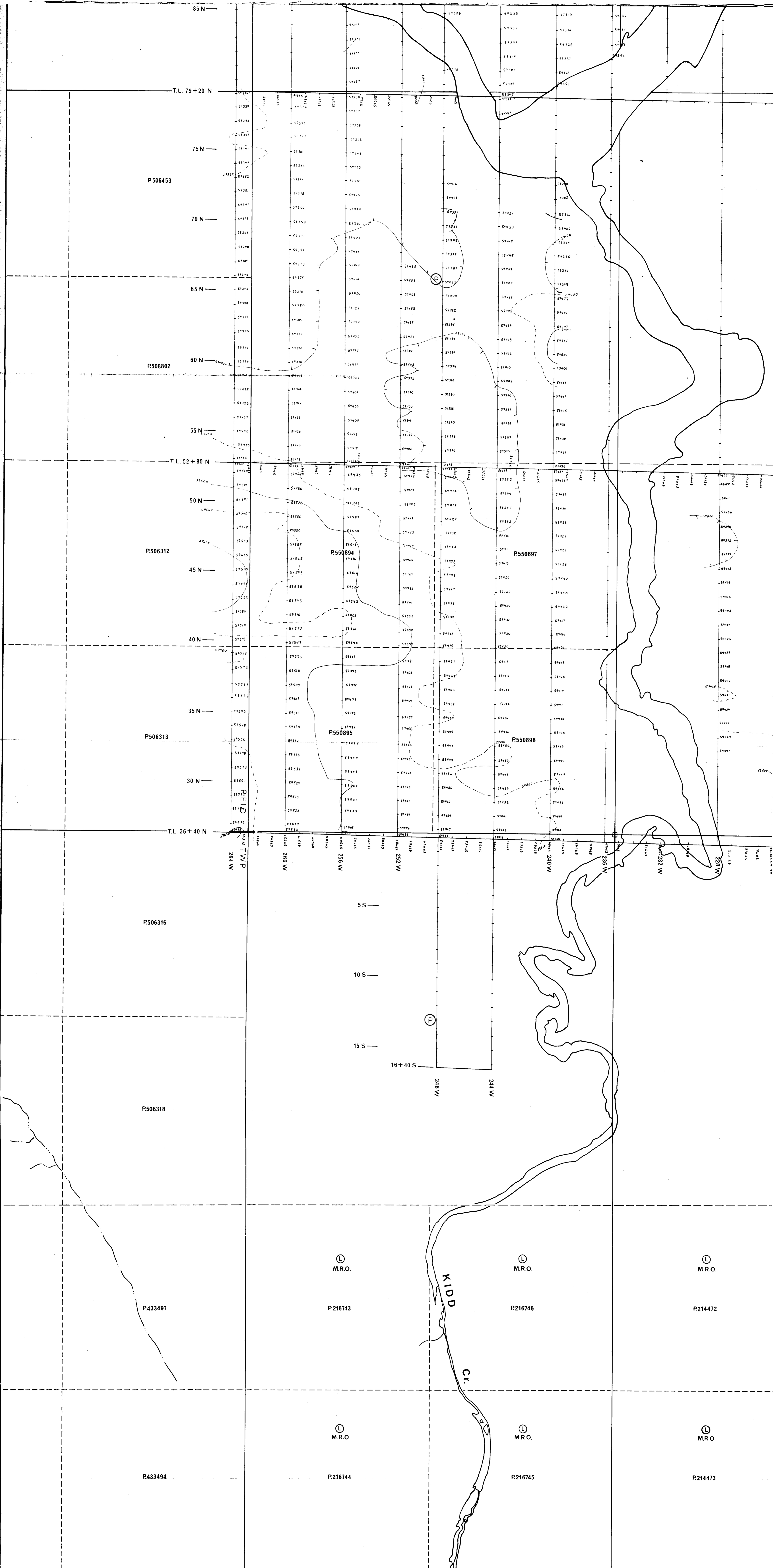
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9

LEGEND

- Claim Post
- Claim Line
- ~ Creek
- ==== Road
- Power Line
- Ⓟ Patented Land
- Ⓛ Leases
- I.B. Iron Bar



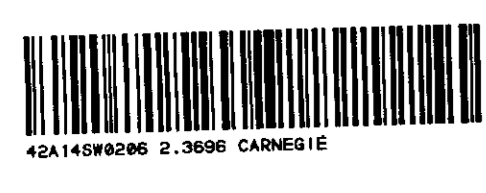


1

12

LEGEND

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- - - Claim Line
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- Power Line
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- Ⓛ Leases
- I.B. Iron Bar



P508775

P508774

P508782

P508783

P508785

P508784

P506431

P506432

P506434

P506433

P506441

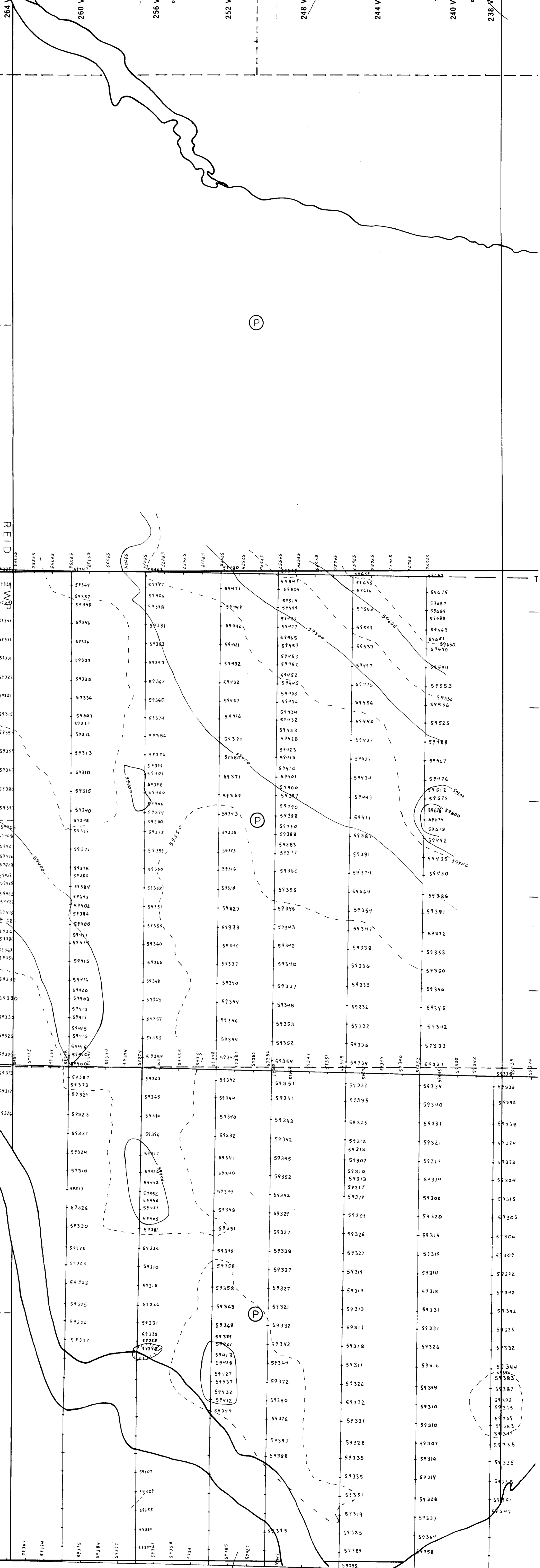
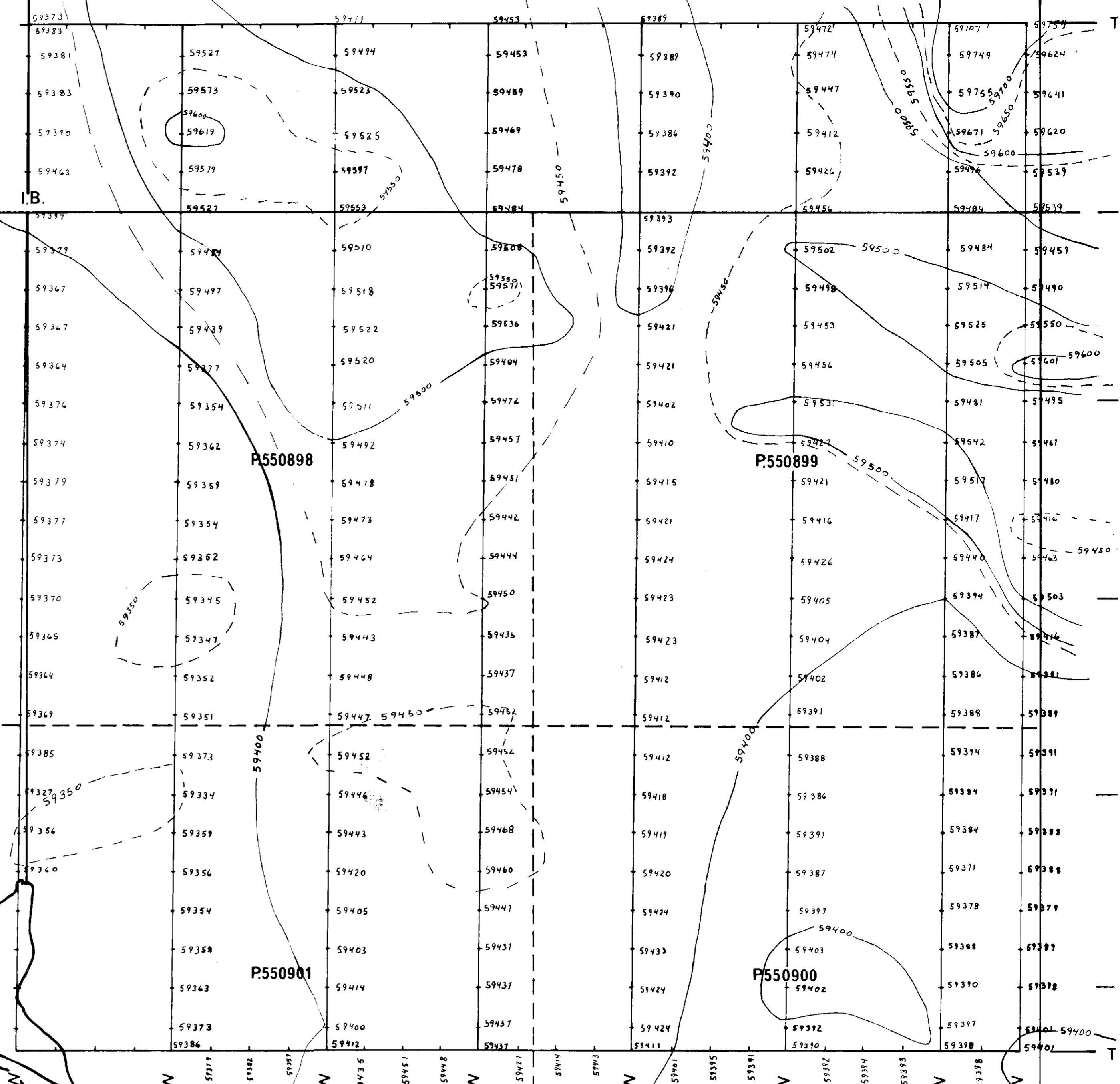
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1

264 W

260 W

256 W

252 W

12

248 W

244 W

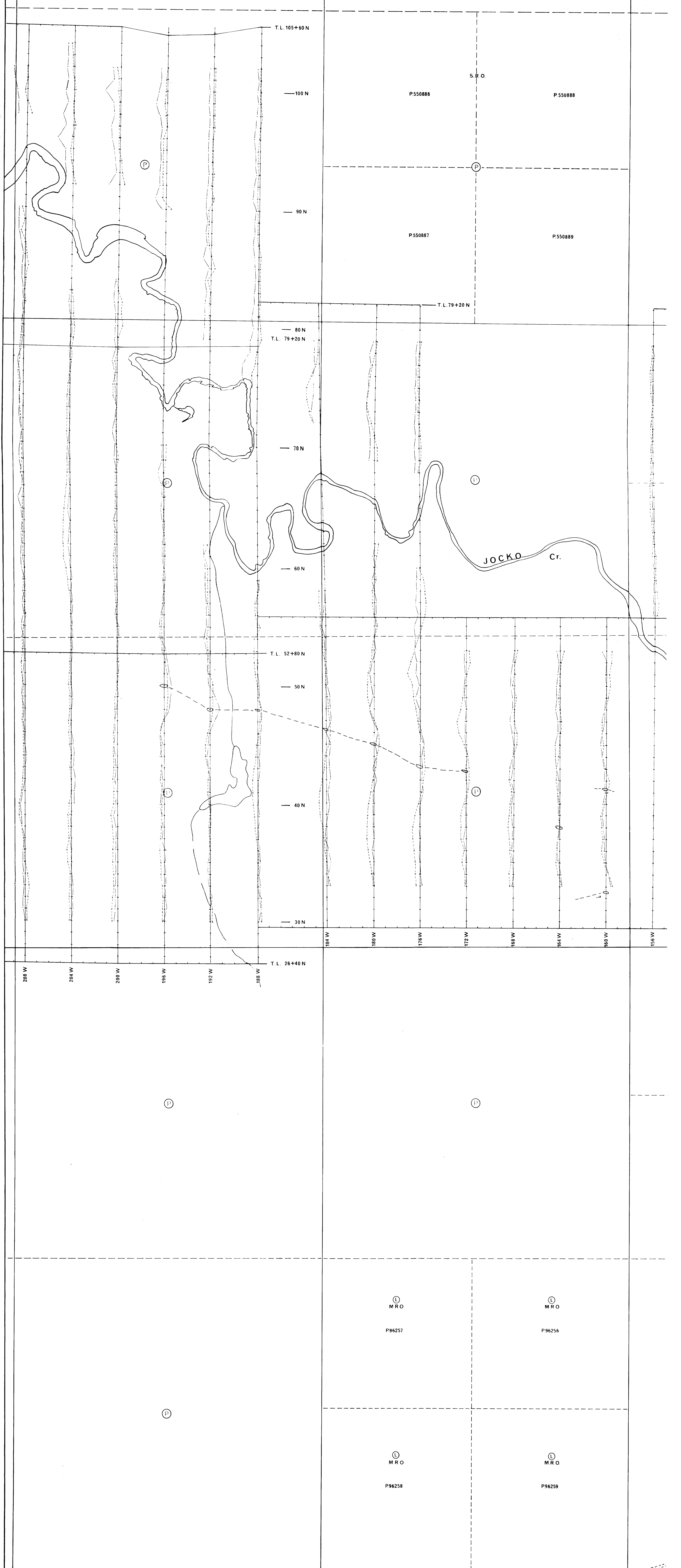
240 W

236 W

LEGEND

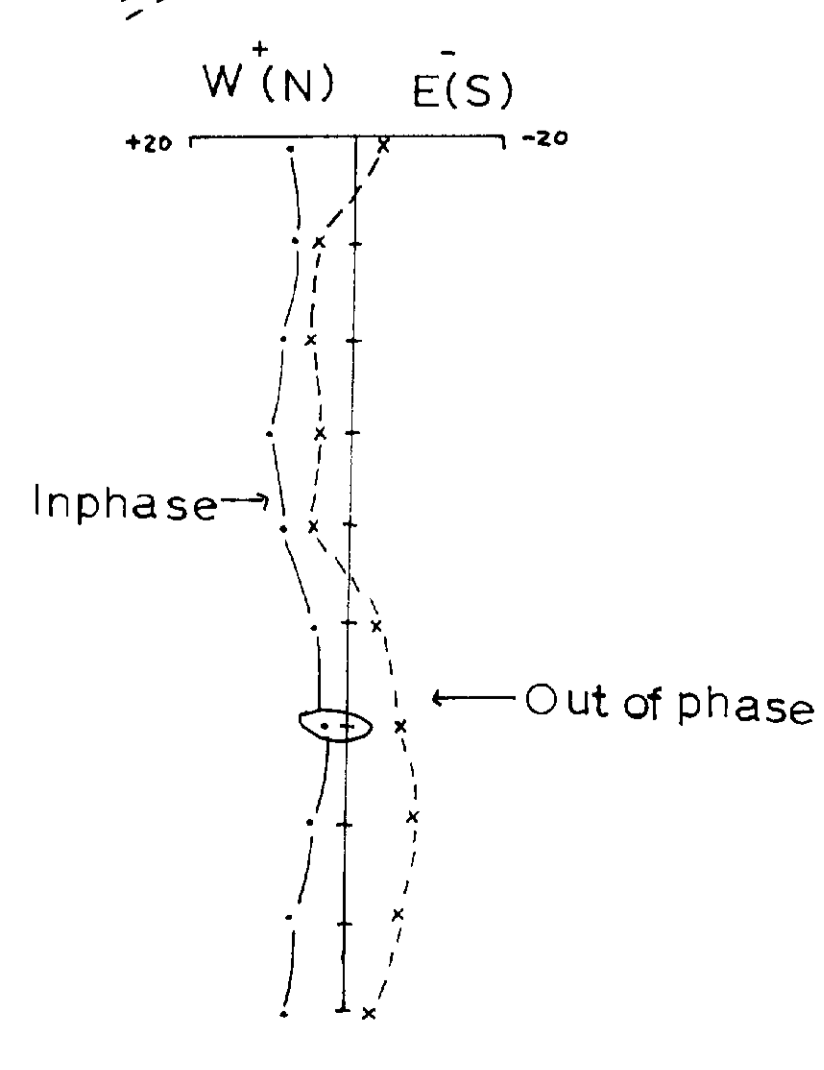
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- Ⓛ Leases
- I.B. Iron Bar





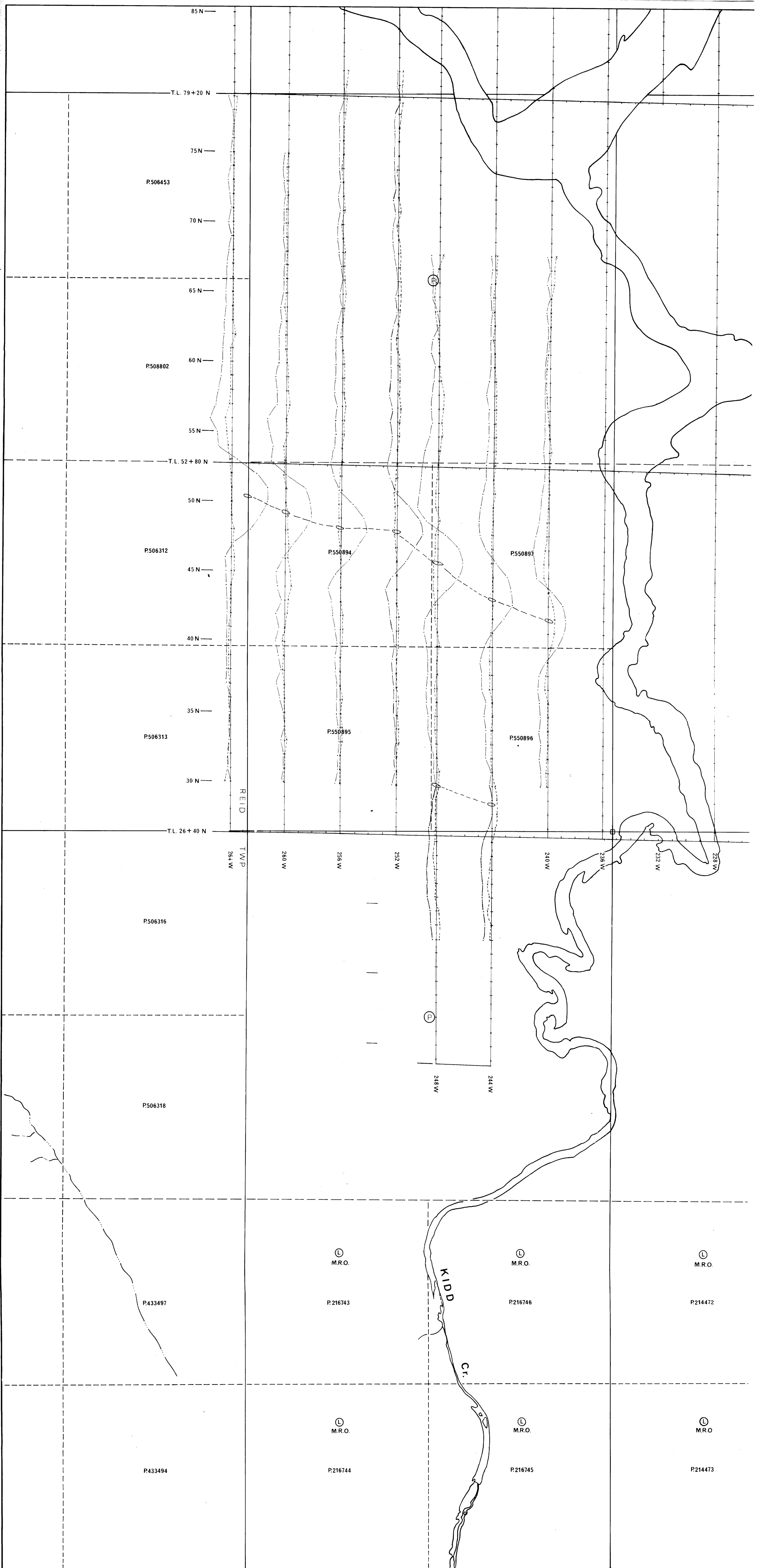
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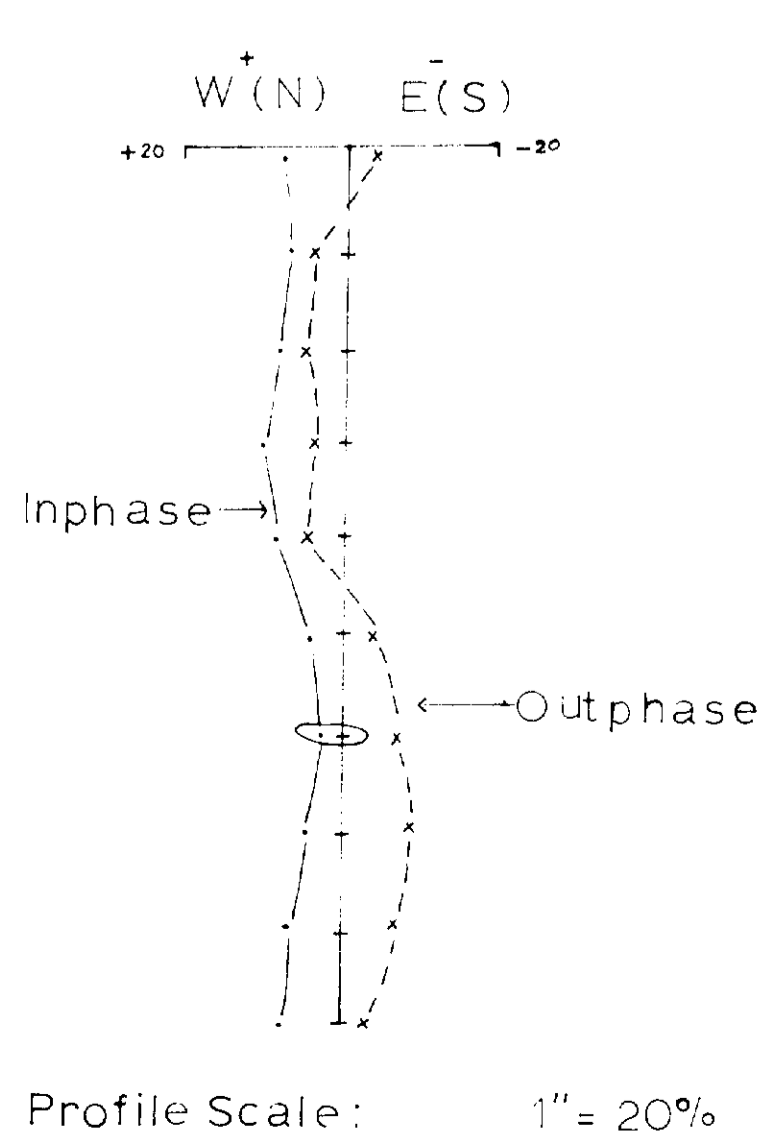
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 Conductor: [Symbol]





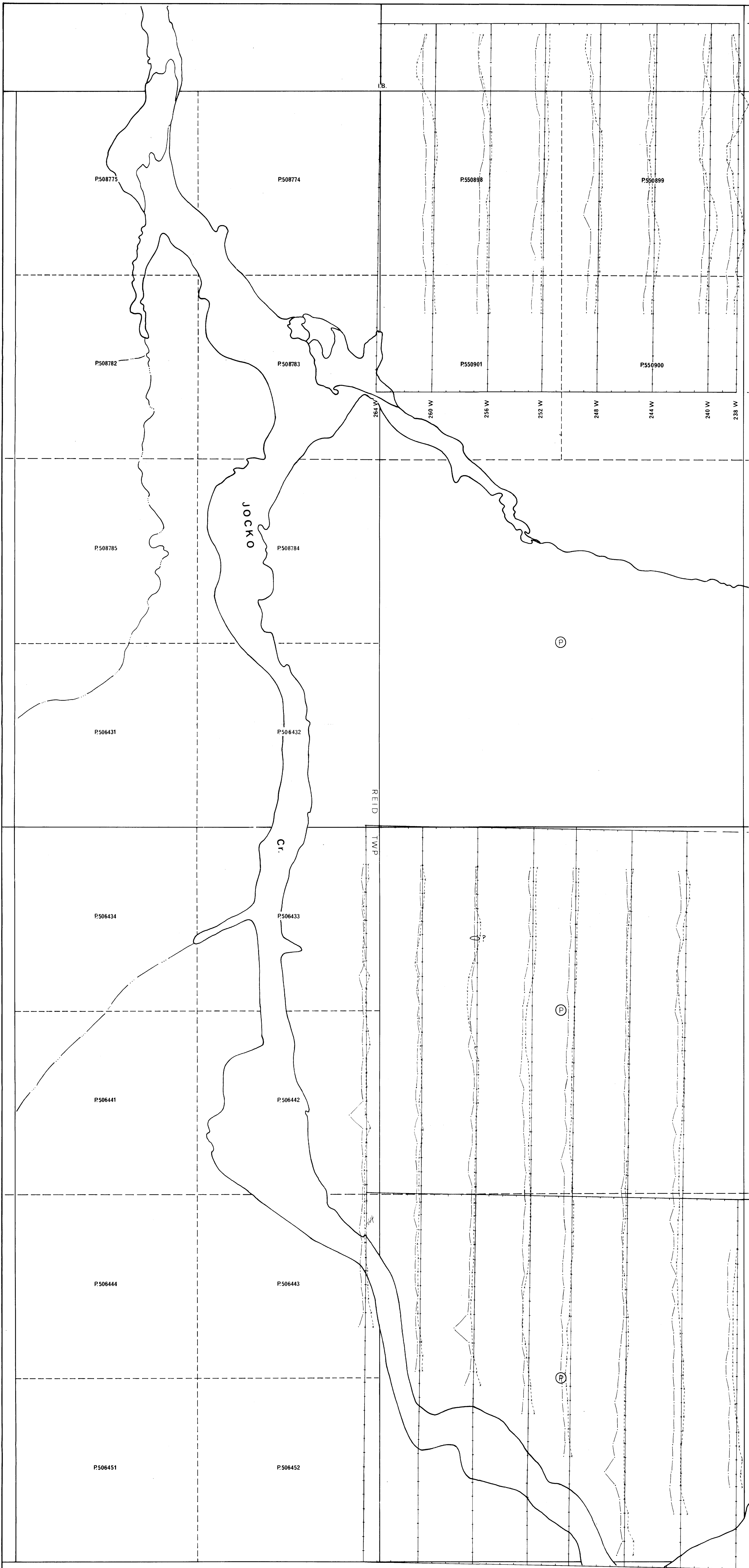
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- Ⓛ Leases
- I.B. Iron Bar



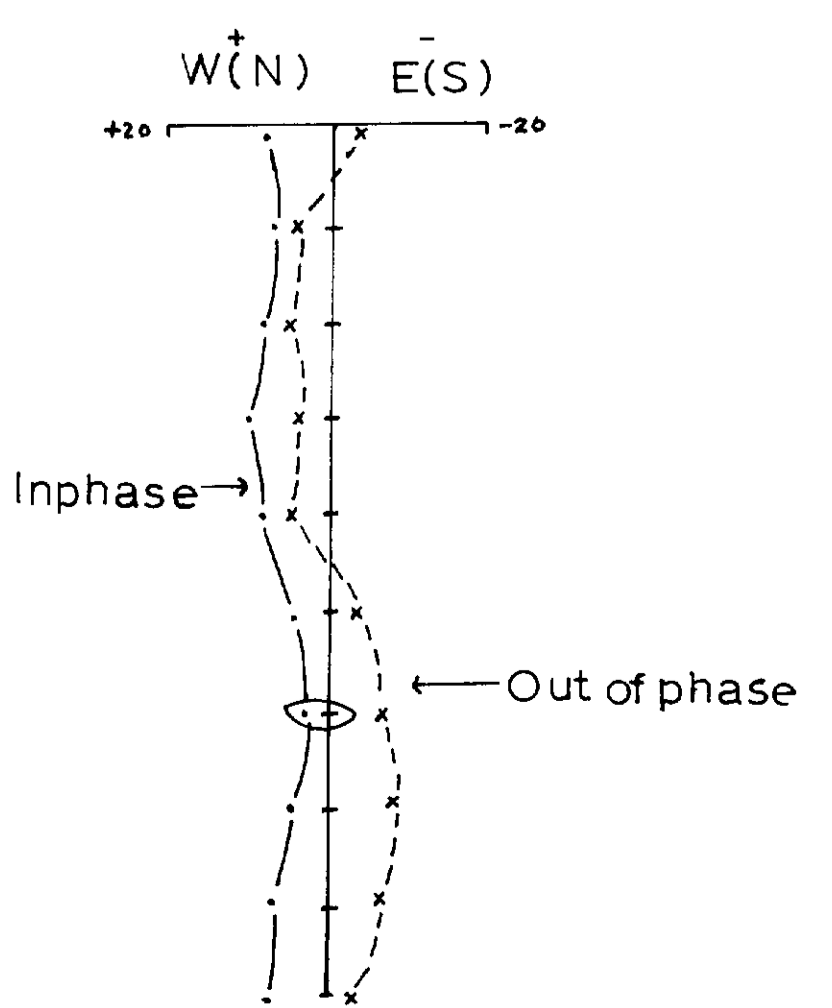
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 Conductor: ○





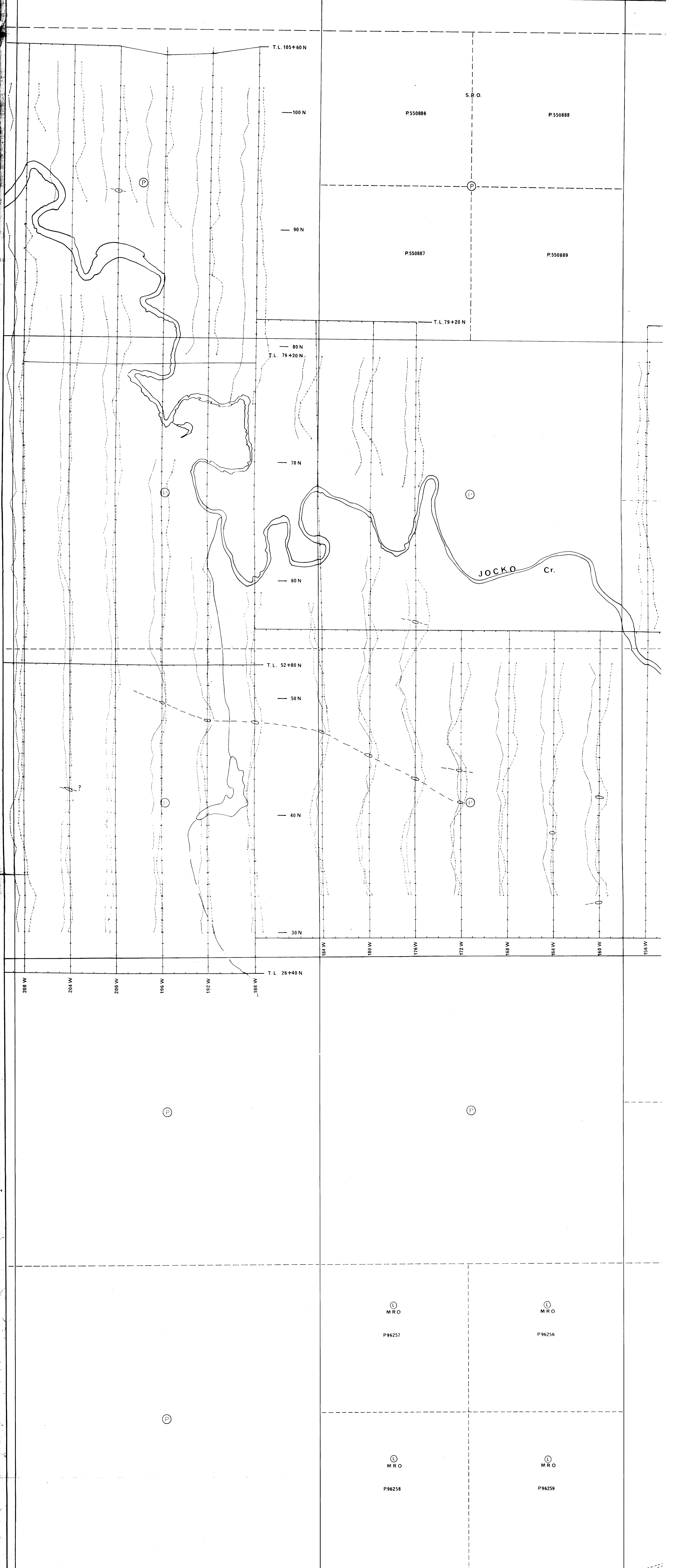
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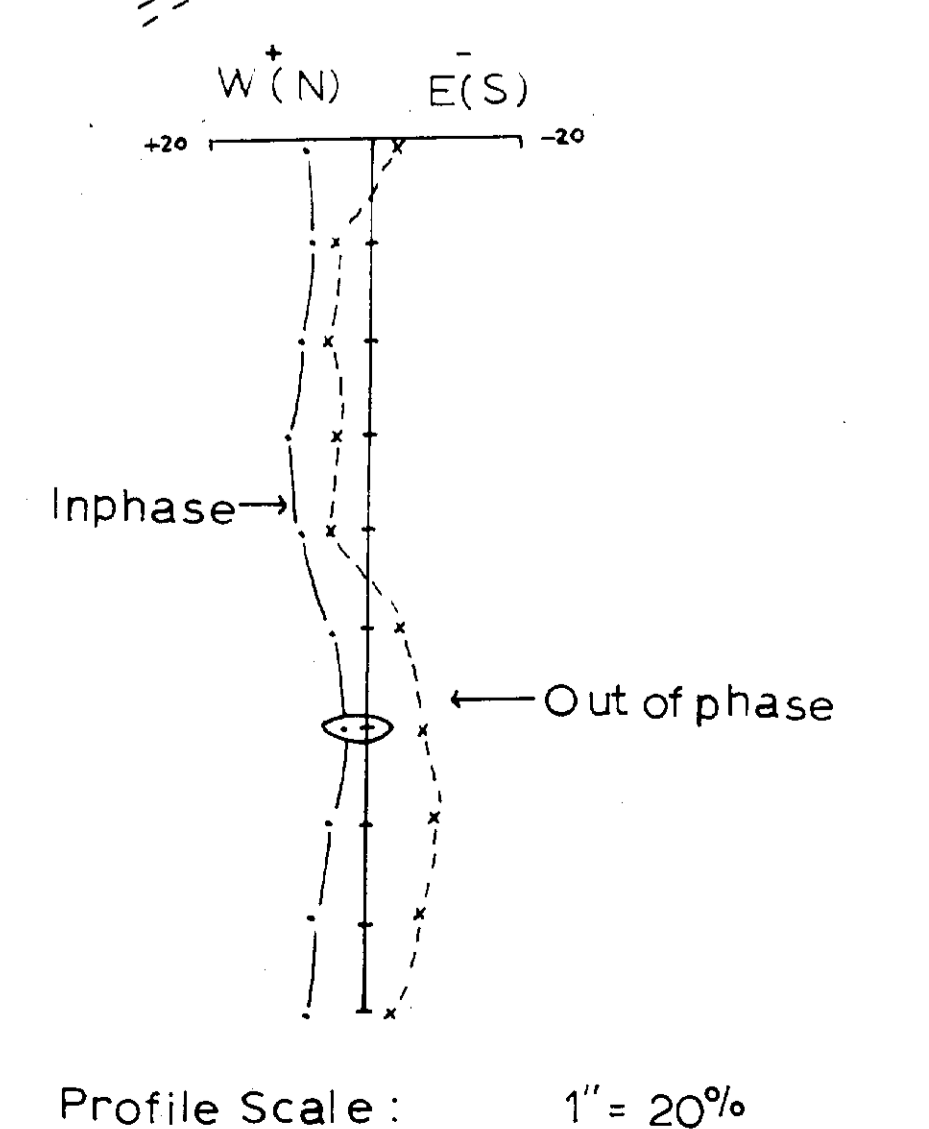
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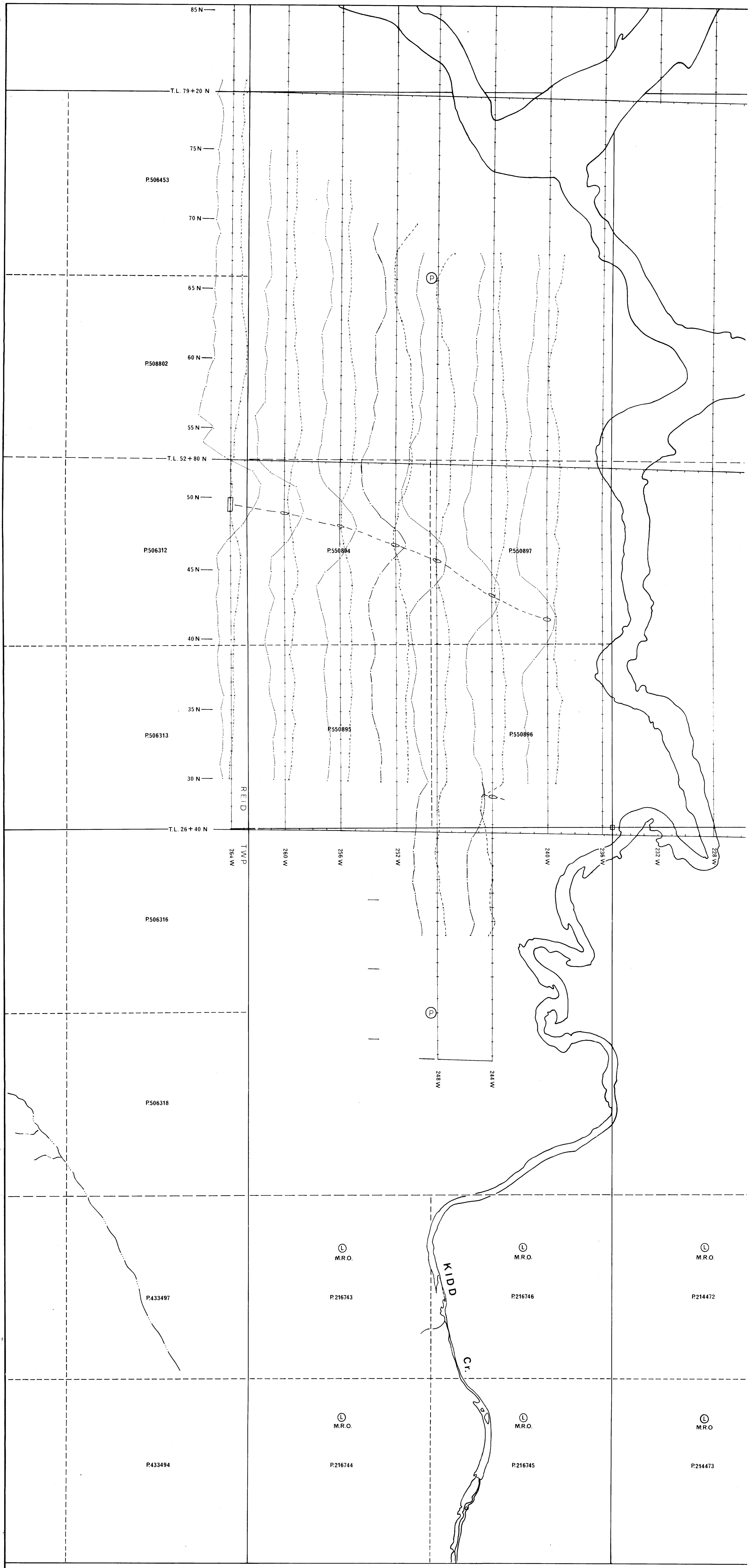




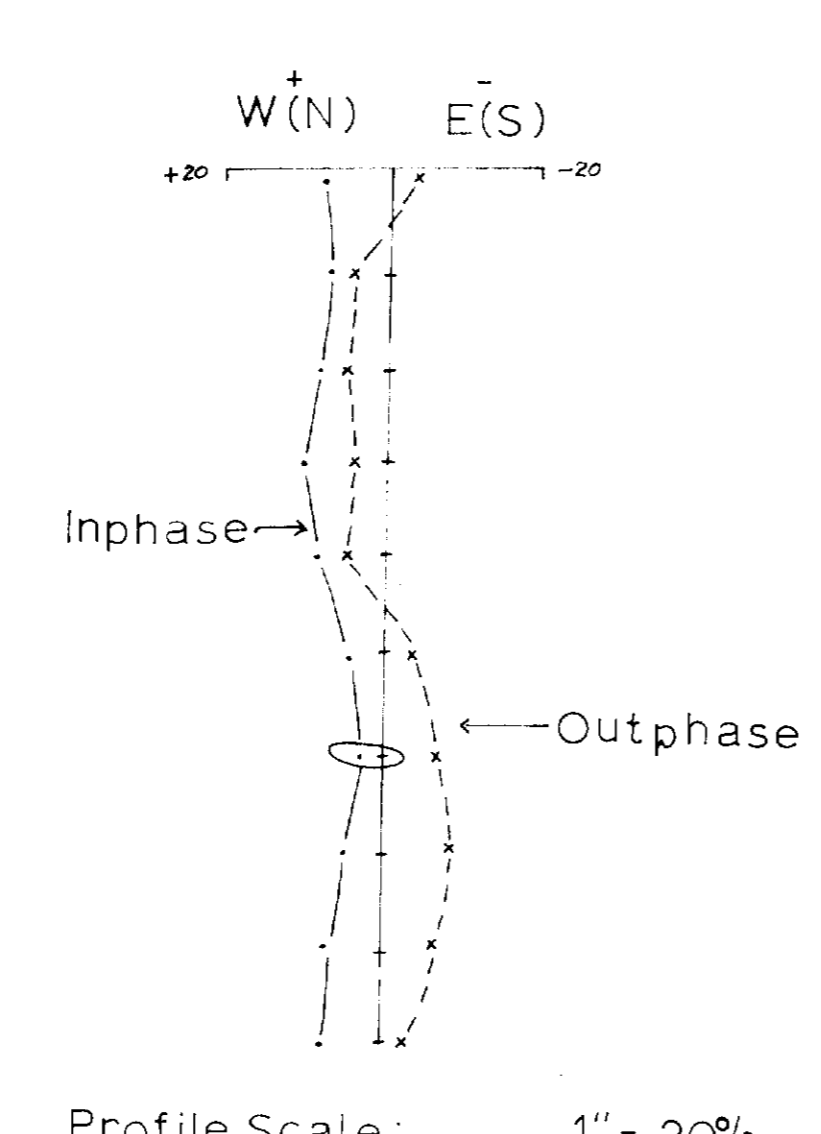
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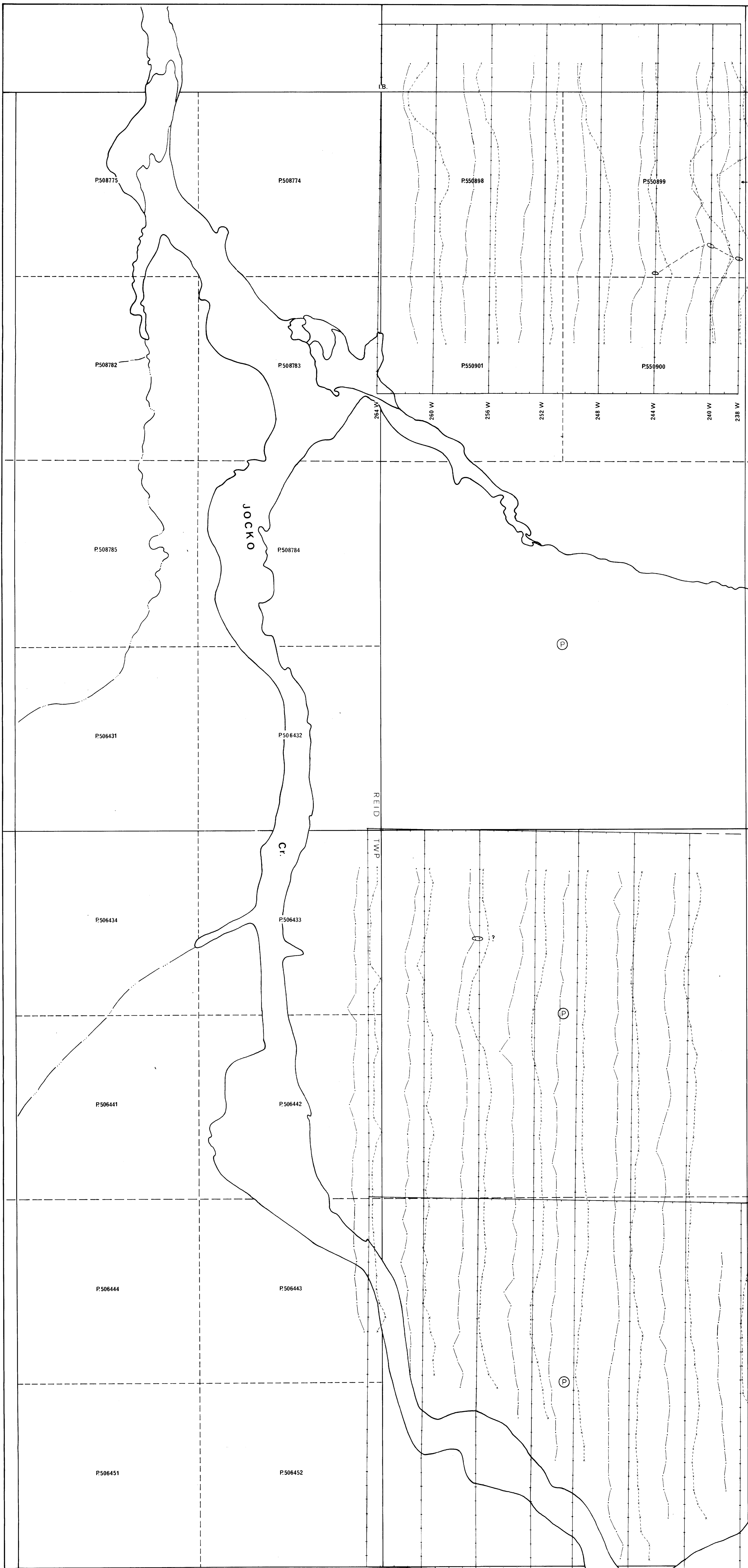


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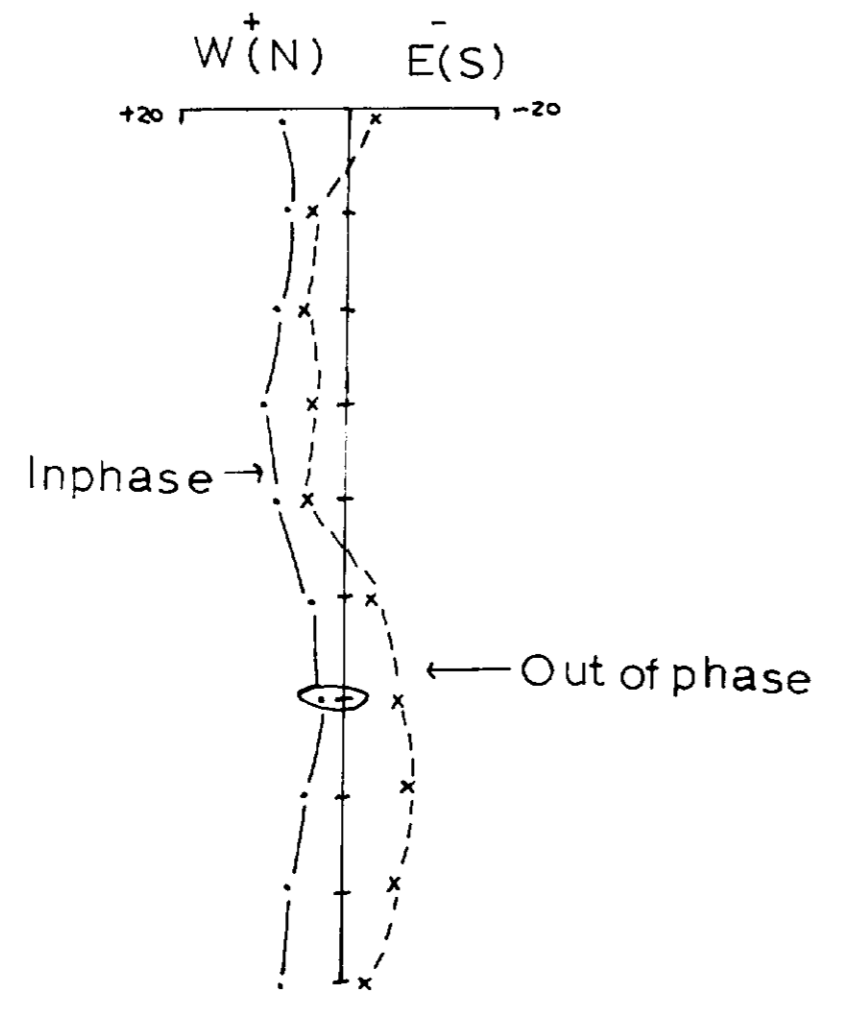
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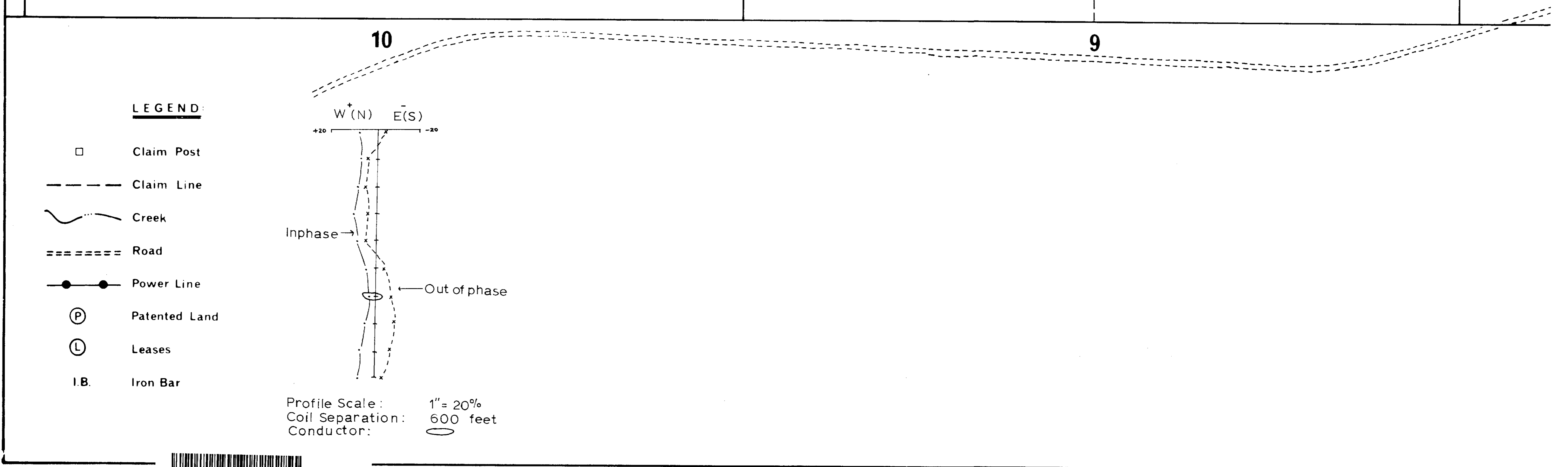
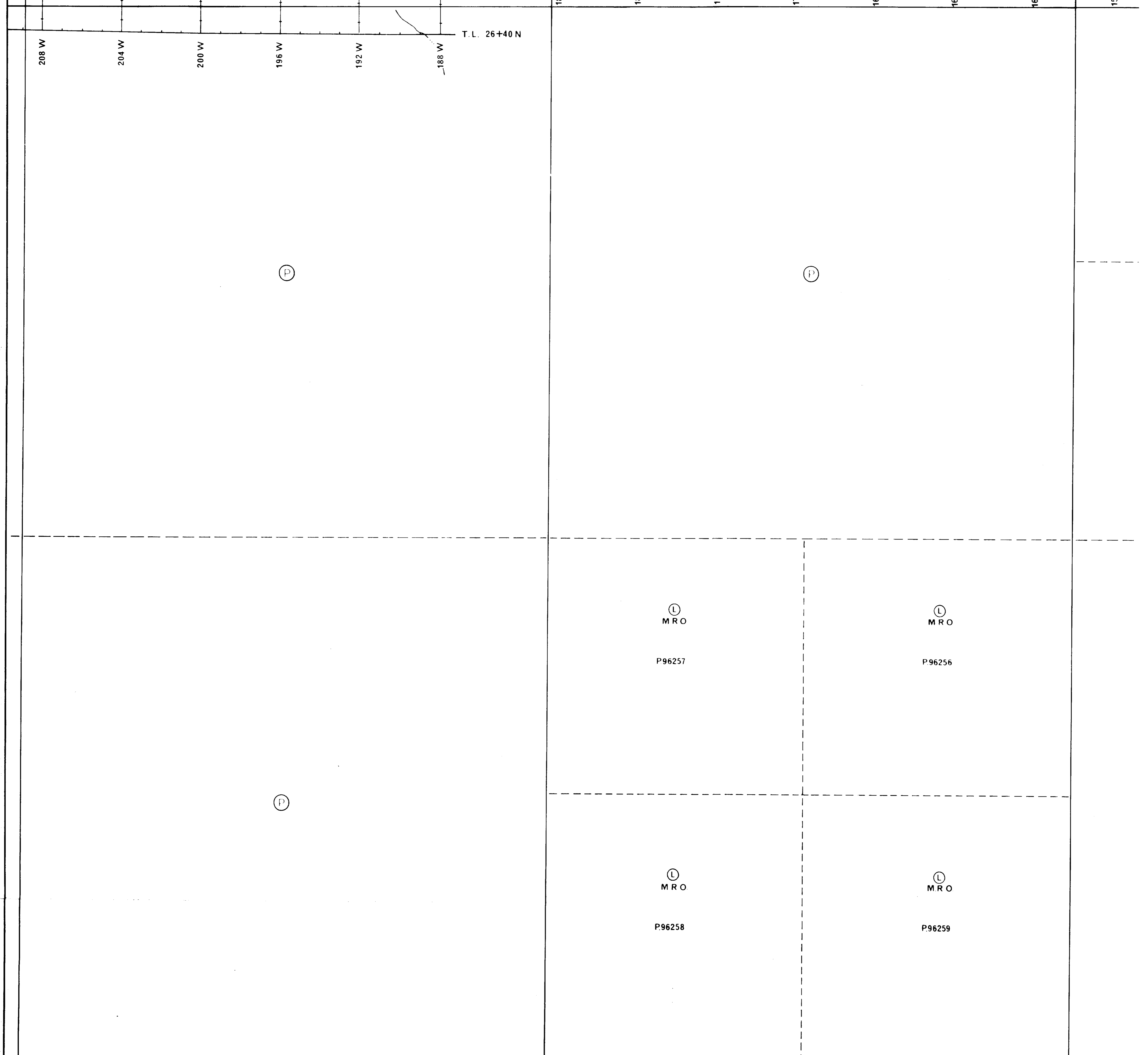
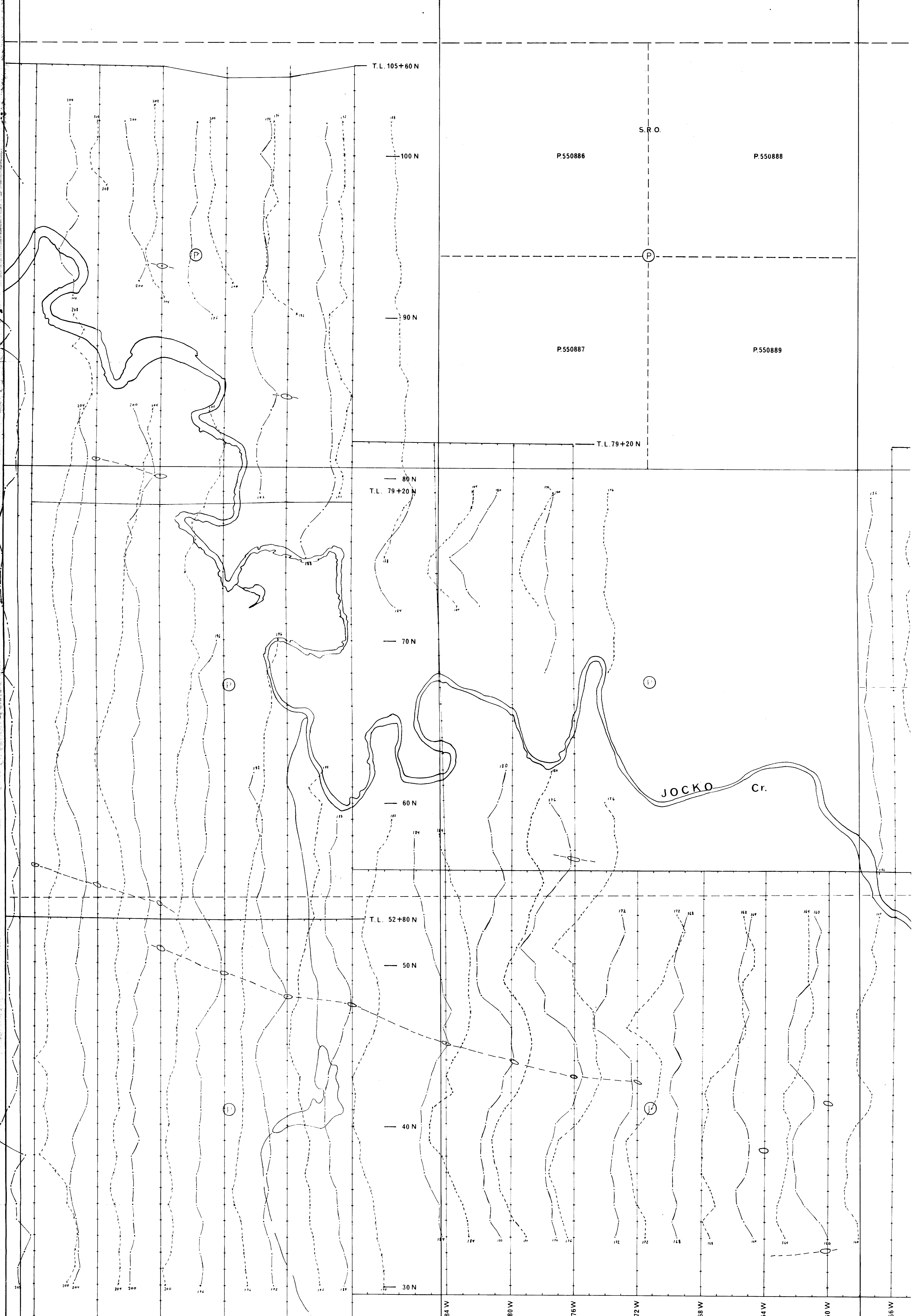
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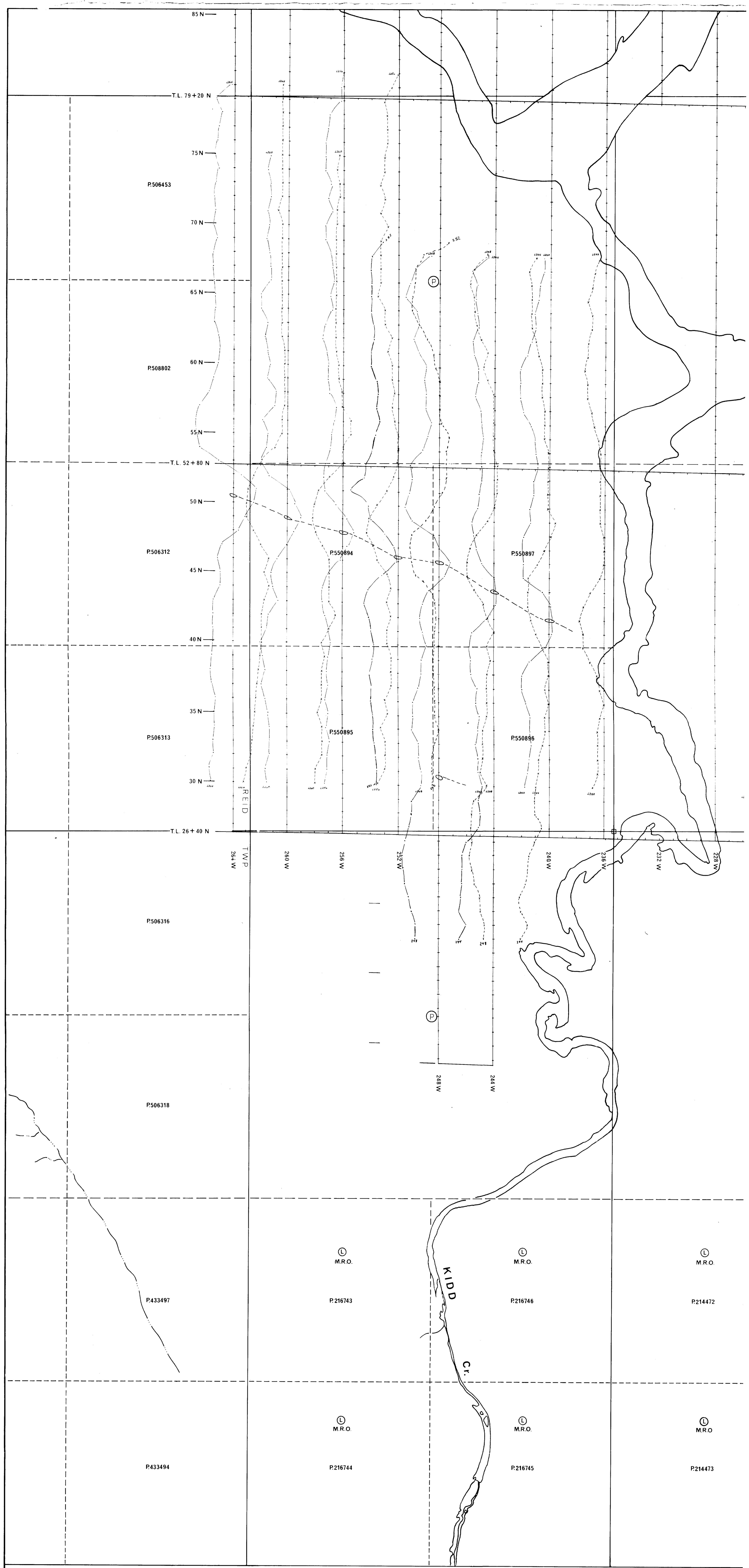
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 Coil Separation: 600 feet
 Conductor: Ⓟ

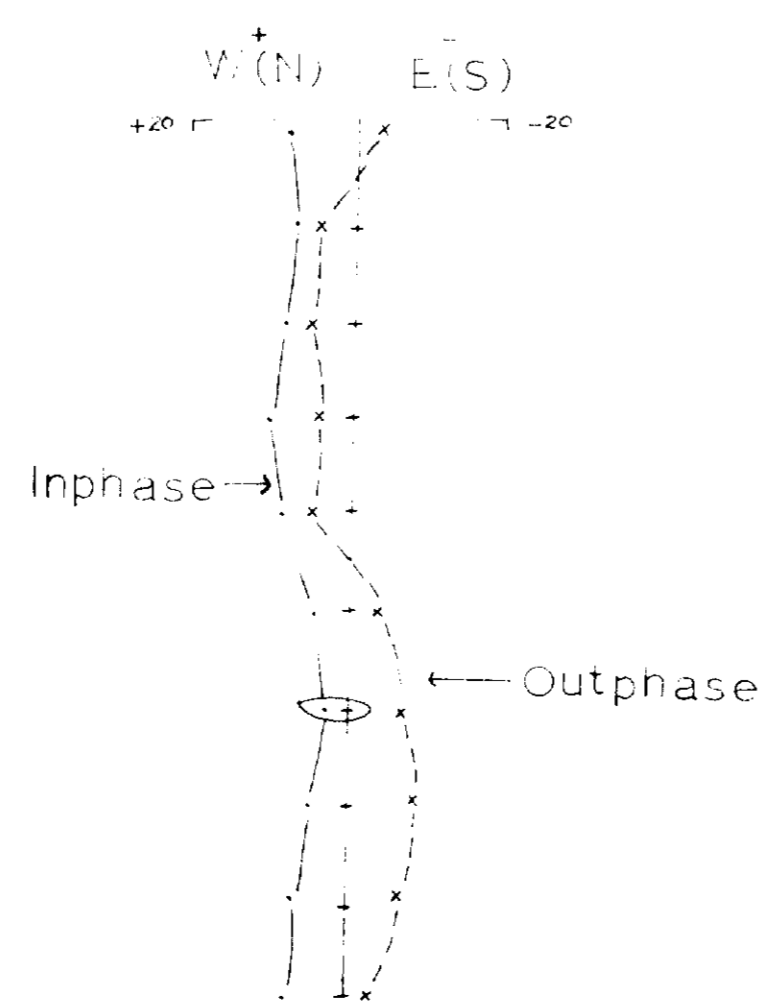






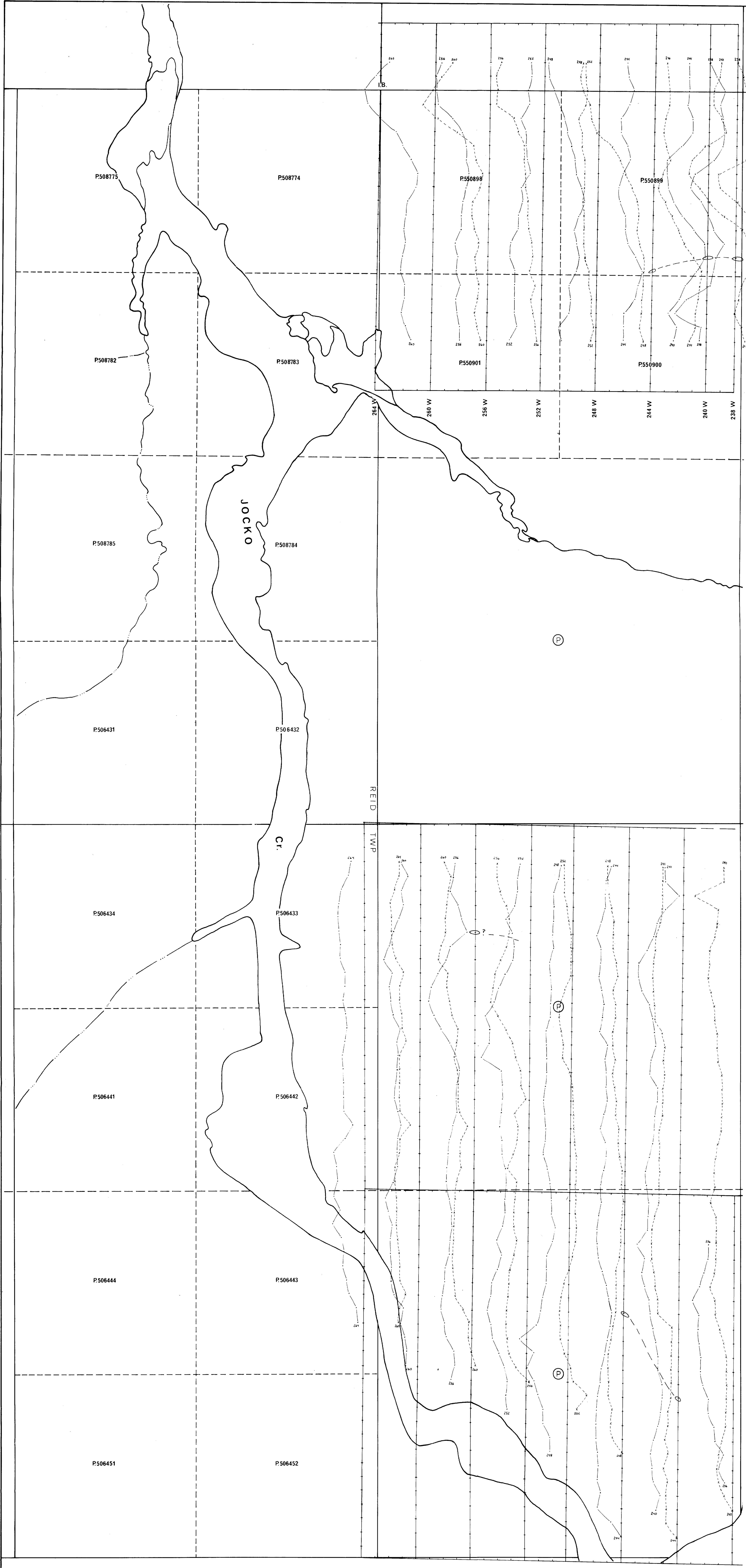
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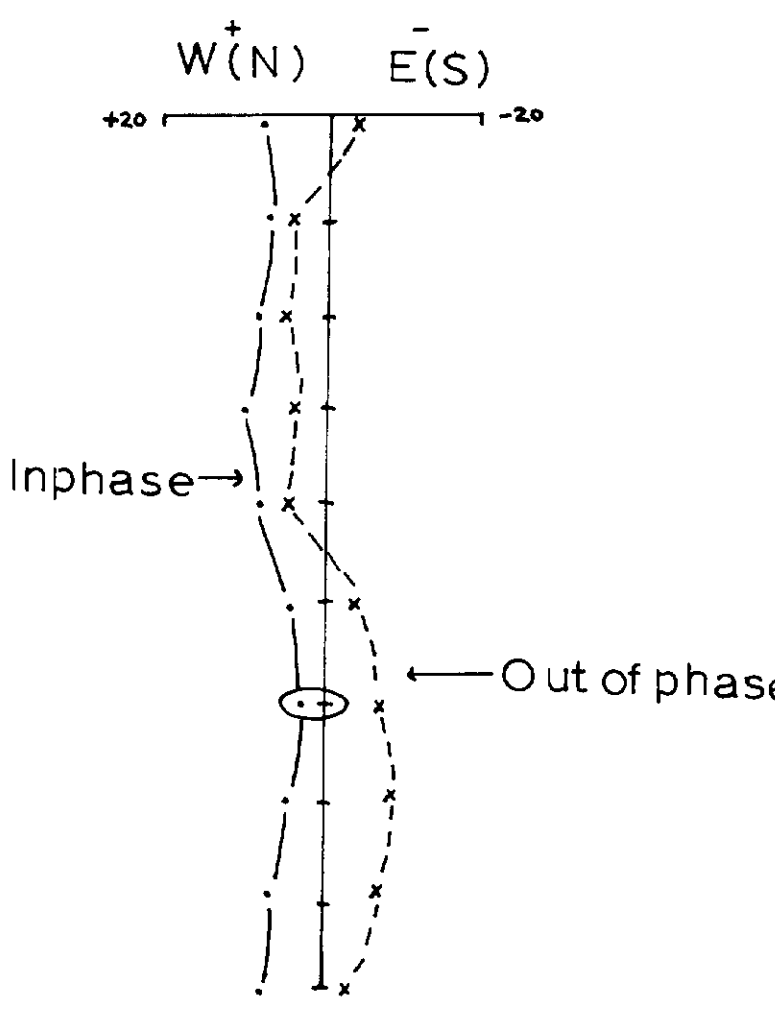
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 1" = 12 feet





LEGEND:

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- Ⓛ Leases
- I.B. Iron Bar



Profile Scale: 1" = 20'
 Coil Separation: 600 feet
 Conductor: ○



V

P.550888

P.550889

(P)

T.L.79+20 N

70 N

60 N

T.L.52+80 N

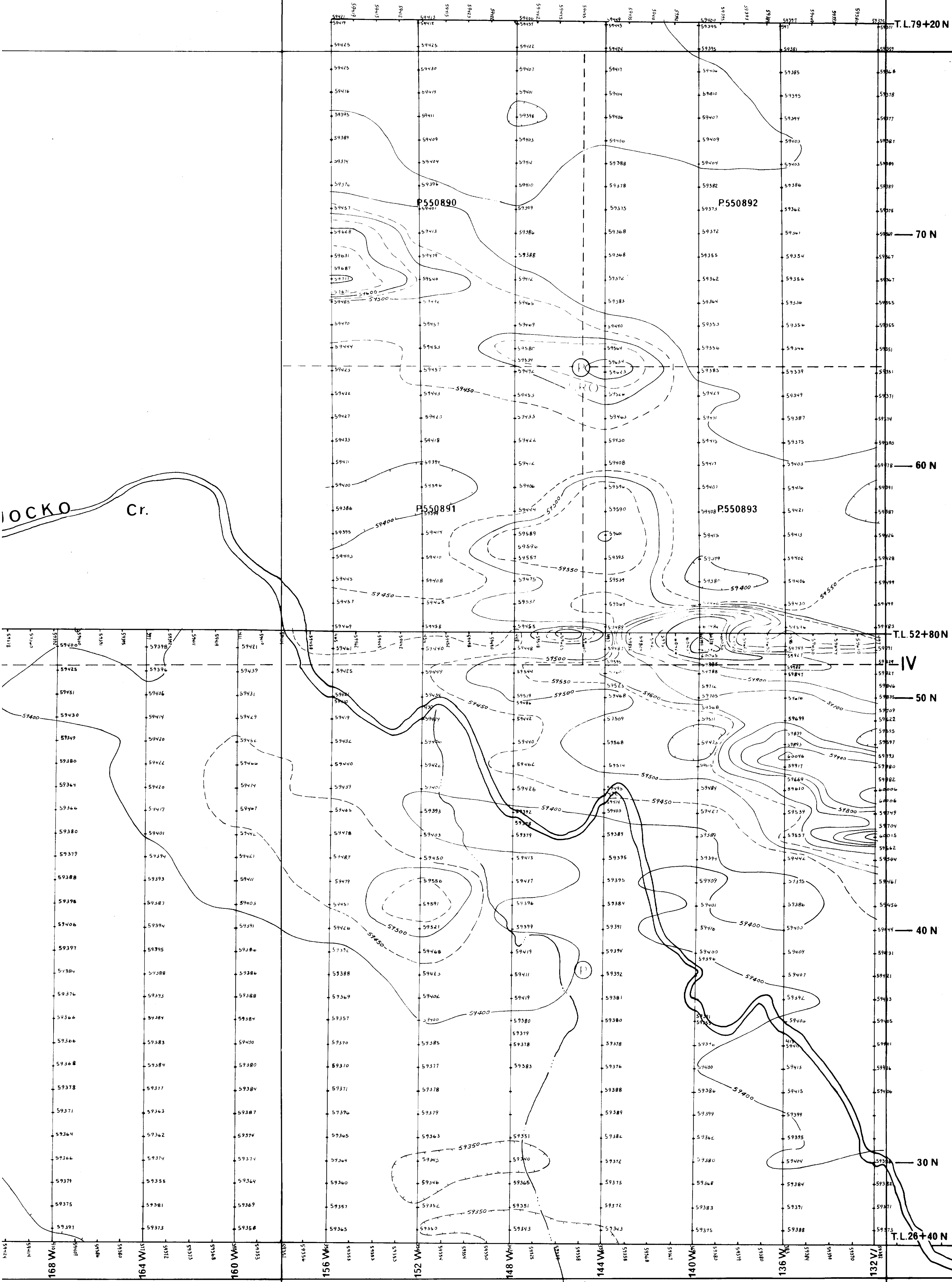
50 N

40 N

30 N

T.L.26+40 N

IOCKO Cr.



(L) MRO
P96454

(L) MRO
P96458

(L) MRO
P96455

(L) MRO
P96459

(L) MRO
P96256

(L) MRO
P96259

8

ROSARIO RESOURCES CANADA LTD.

CARNEGIE TWP.

TOTAL FIELD MAGNETICS SURVEY

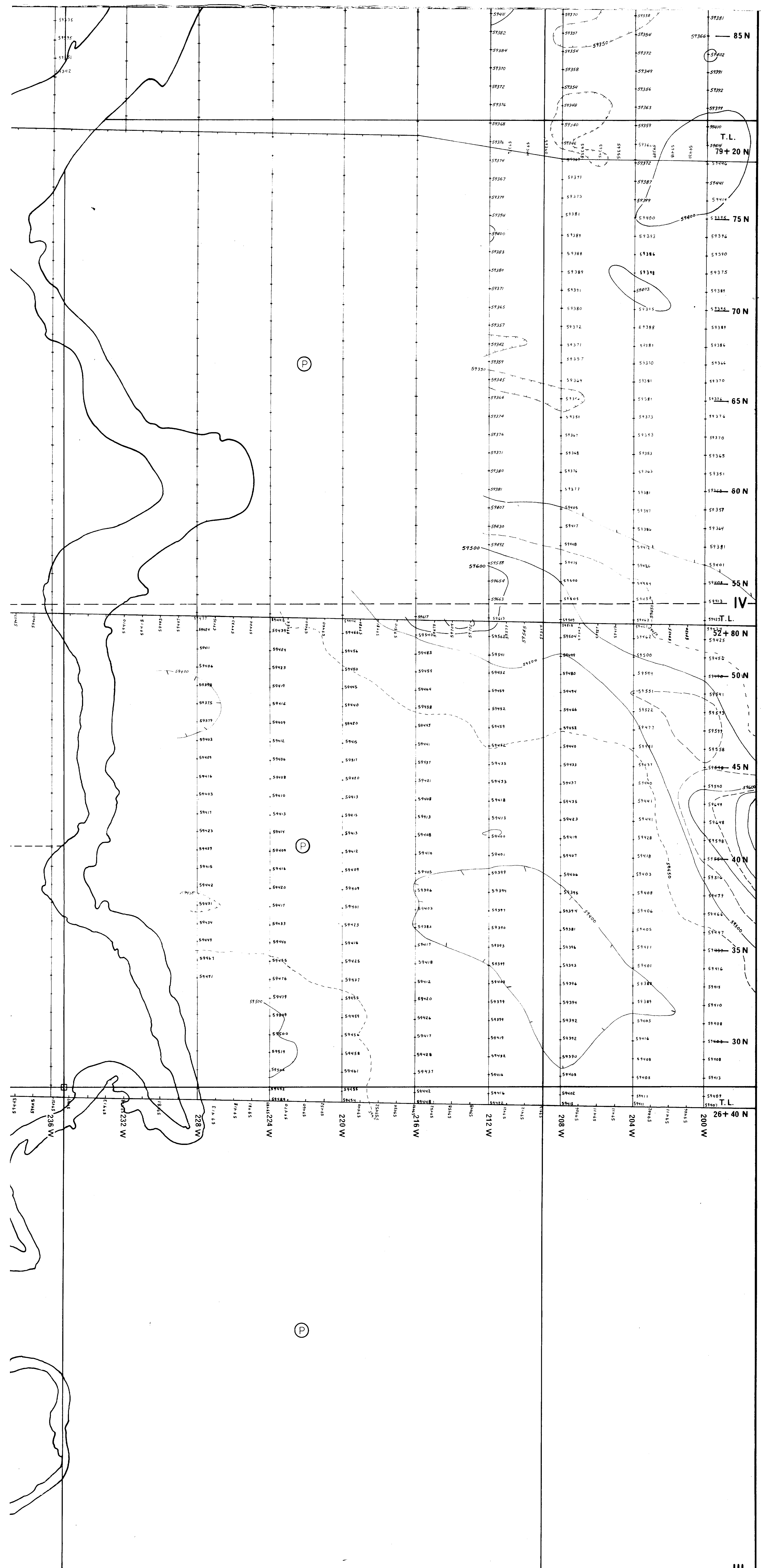
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INST : GEOMETRICS

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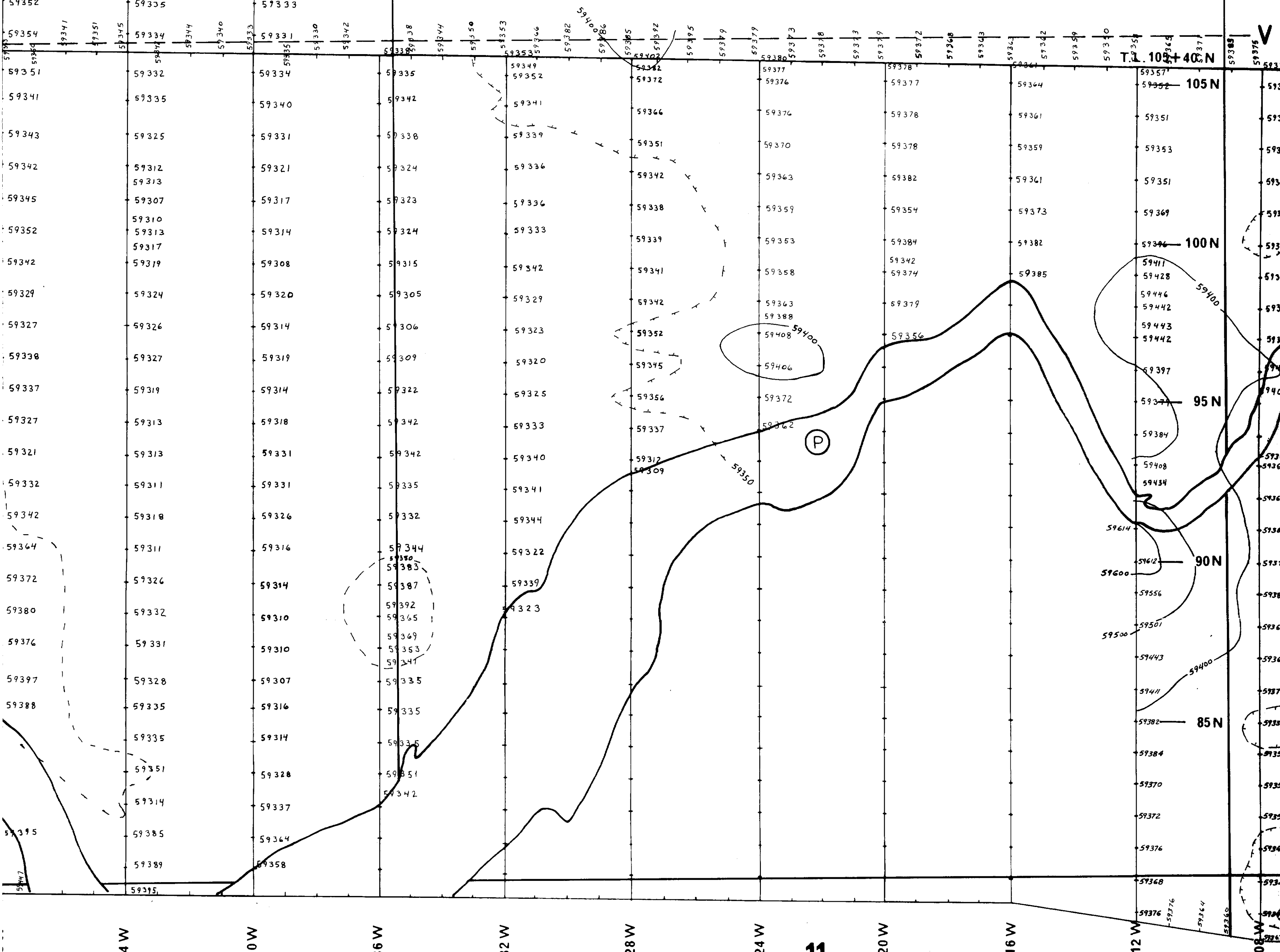
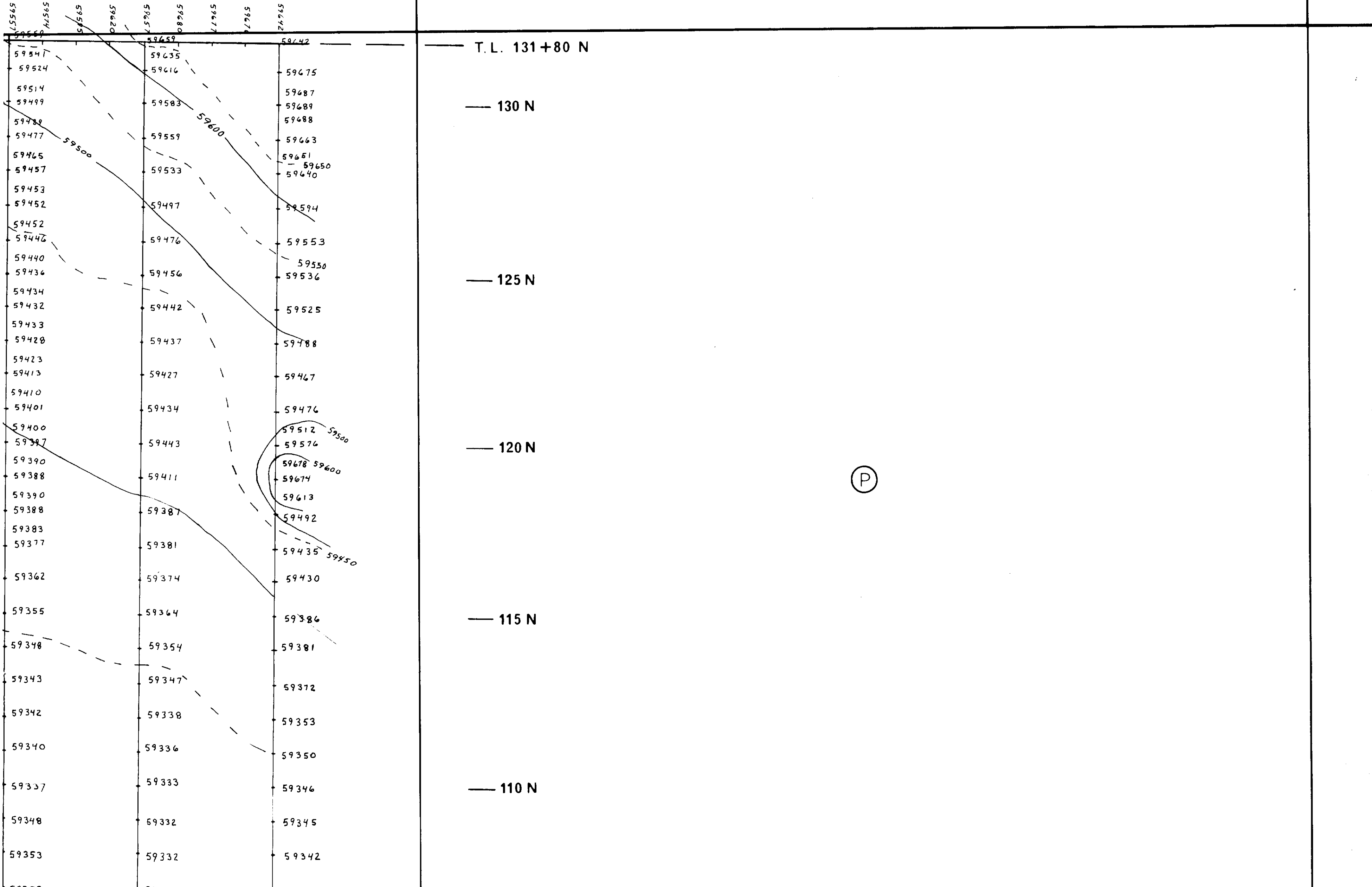
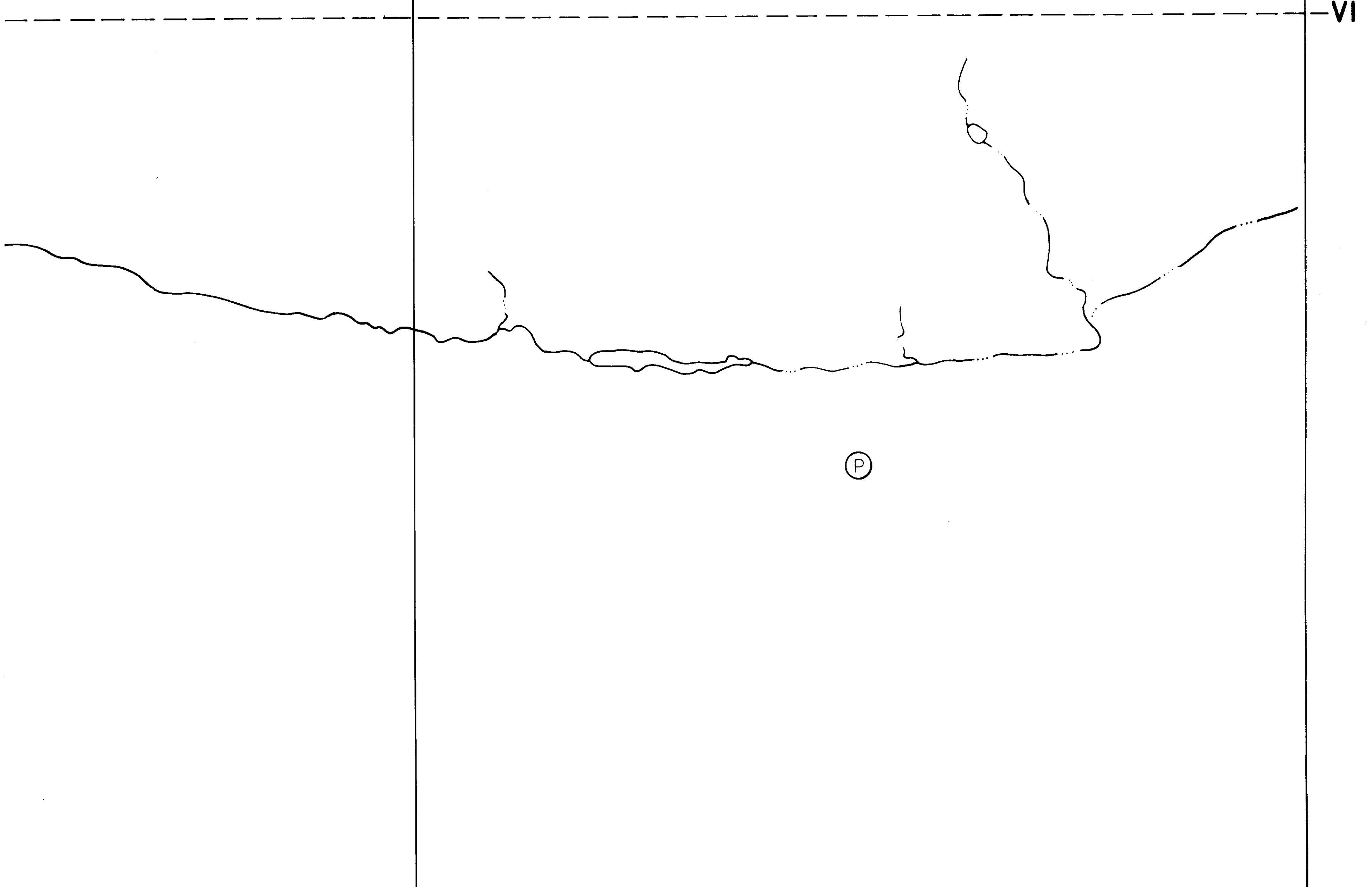
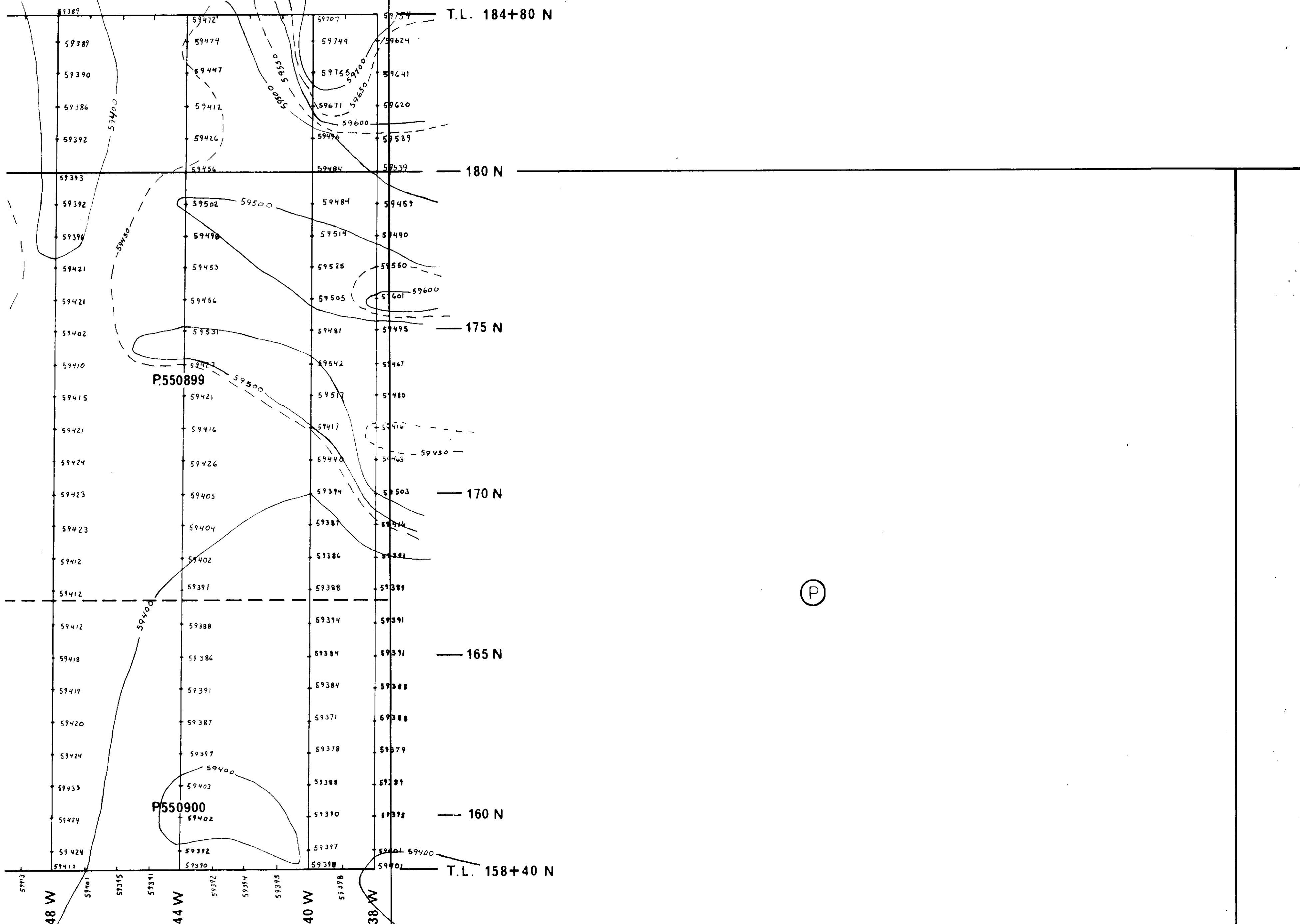
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Sheet 3



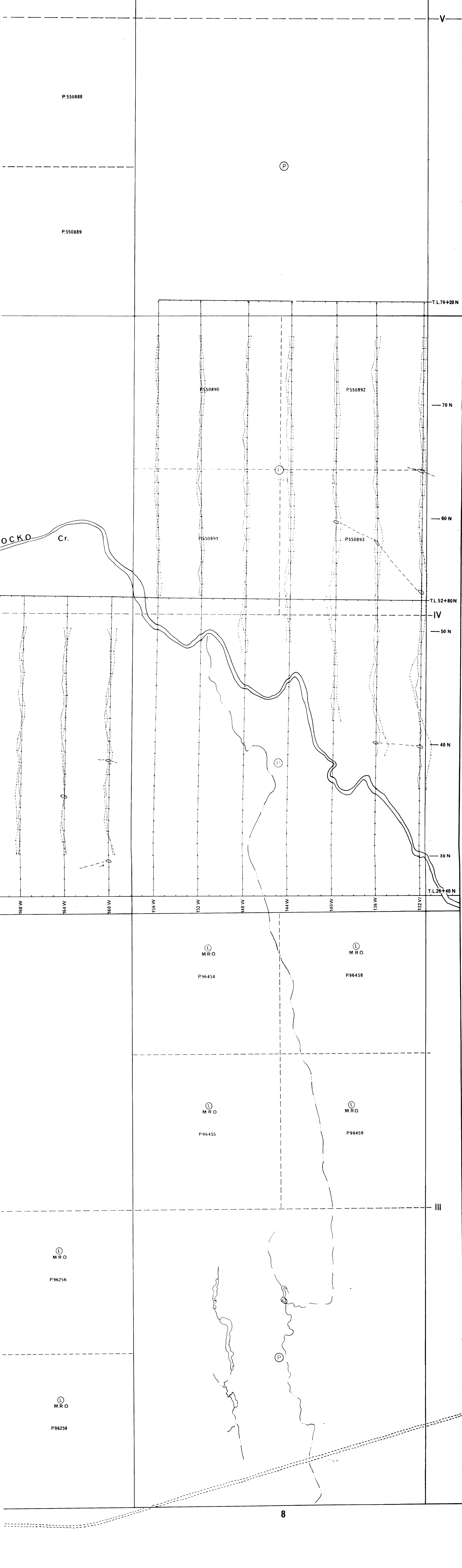
R. Middleton

ROSARIO RESOURCES CANADA LTD.	
CARNEGIE & REID TWPS.	
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OPER. : GEOEX	INST. : GEOMETRICS
SCALE : 1" = 200'	DATE : JULY-OCT. 1980



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ROSARIO RESOURCES CANADA LTD.	
CARNEGIE & REID TWPS.	
TOTAL FIELD MAGNETICS SURVEY	
OPER. : GEOEX	INST. : GEOMETRICS
SCALE : 1" = 200'	DATE : JULY-OCT. 1980



P.550888

P.550889

P550890

P550892

P550891

P550893

OCKO Cr.

168 W

164 W

160 W

156 W

152 W

148 W

144 W

140 W

136 W

132 W

T.L.79+20 N

70 N

60 N

T.L.52+80 N

IV

50 N

40 N

30 N

T.L.28+40 N

MRO

P96454

MRO

P96458

MRO

P96455

MRO

P96459

MRO

P96256

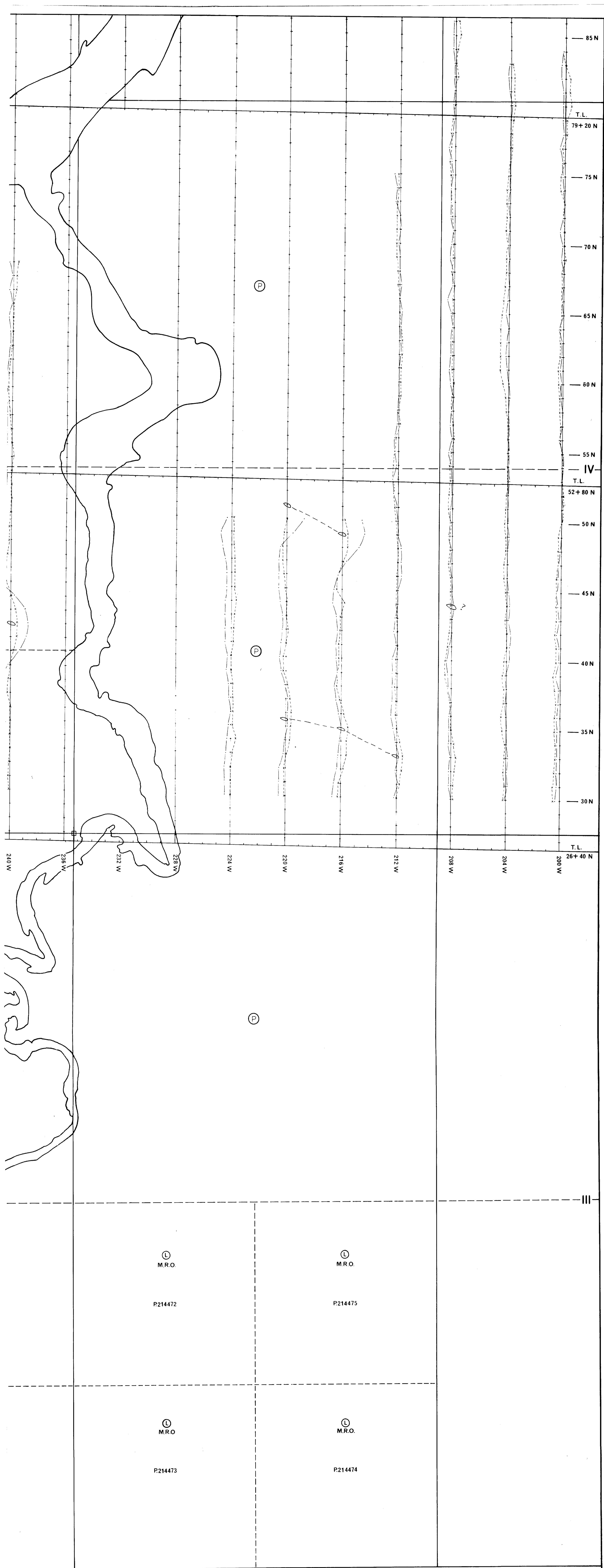
MRO

P96259

8

R. M. [Signature]

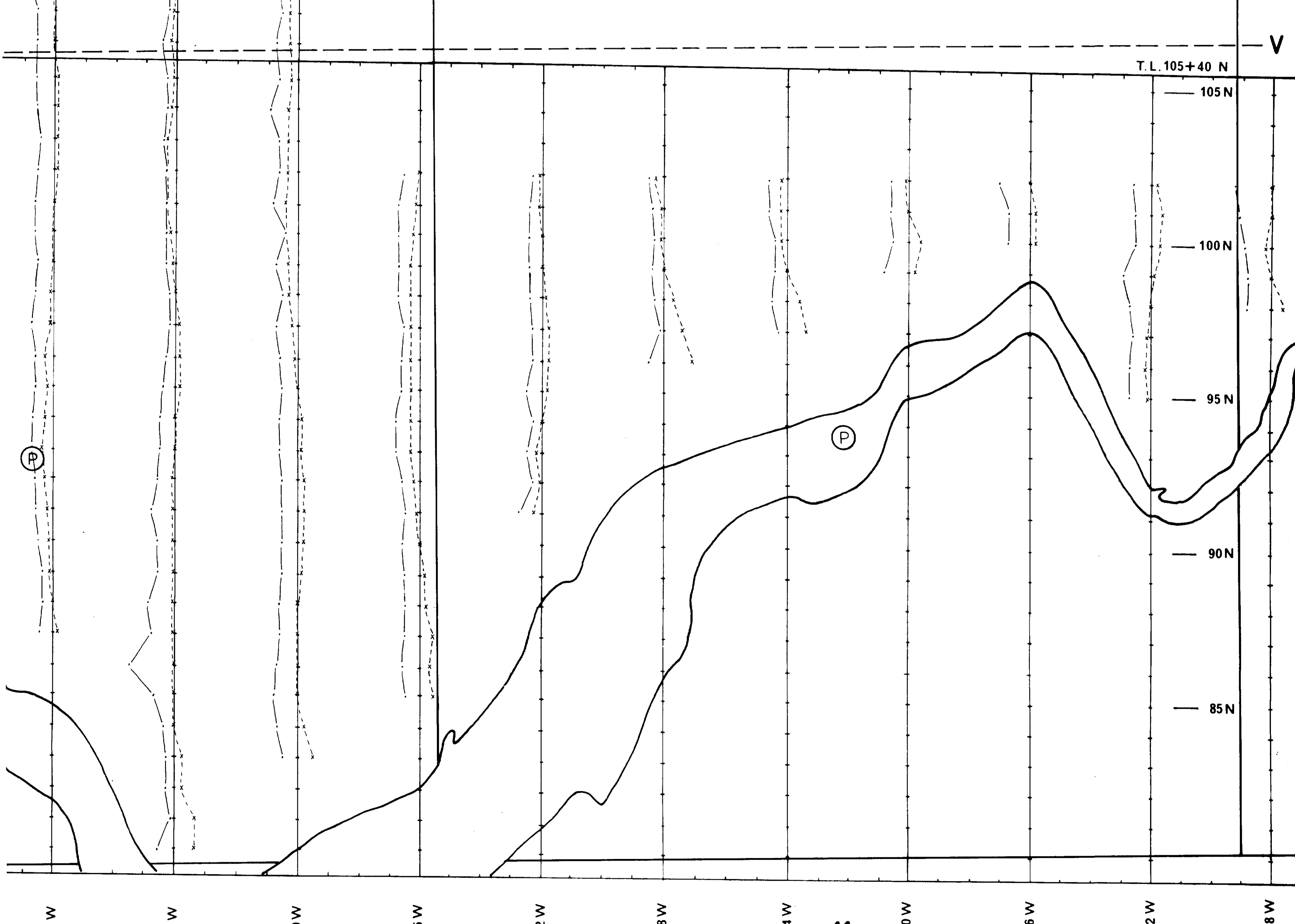
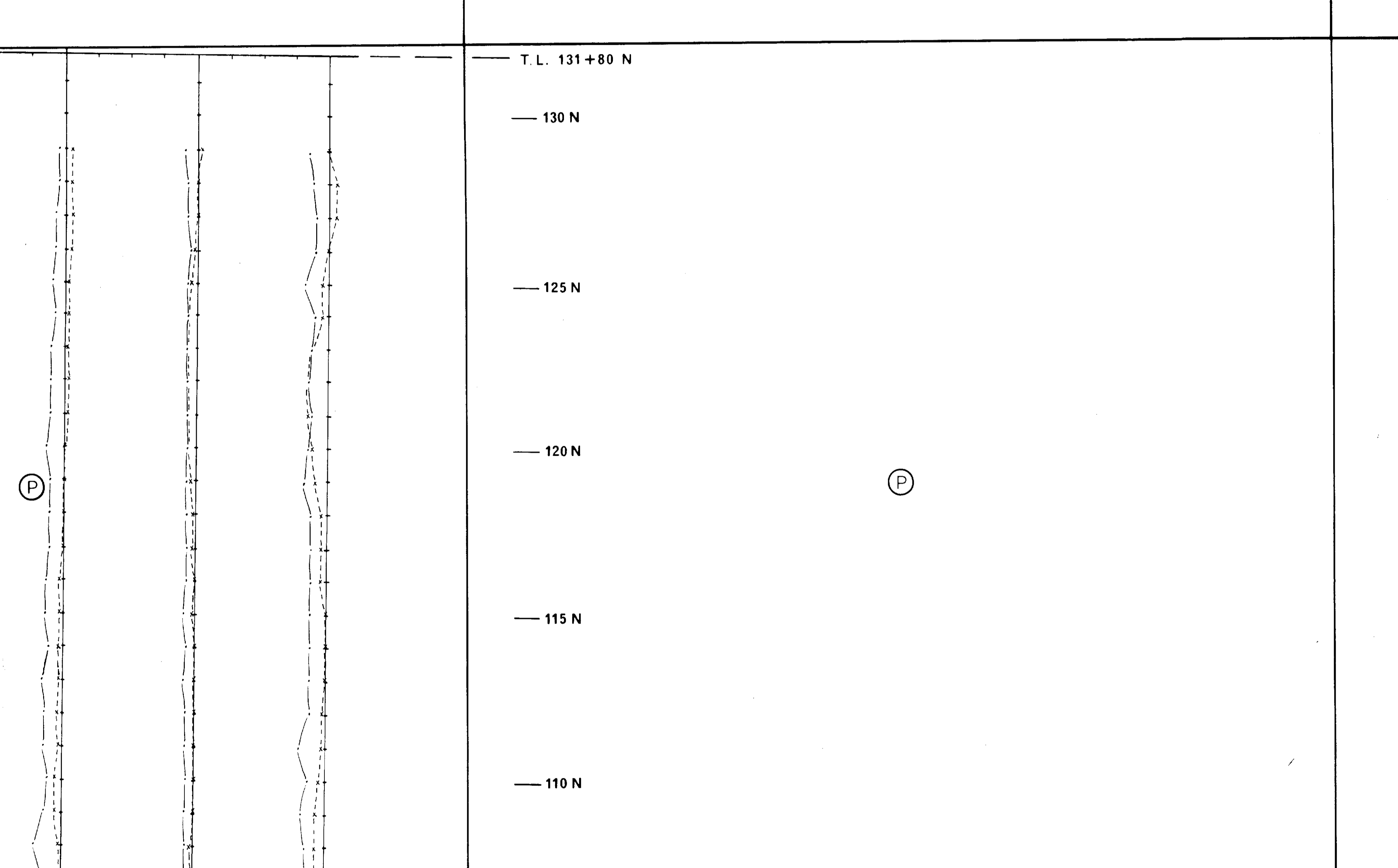
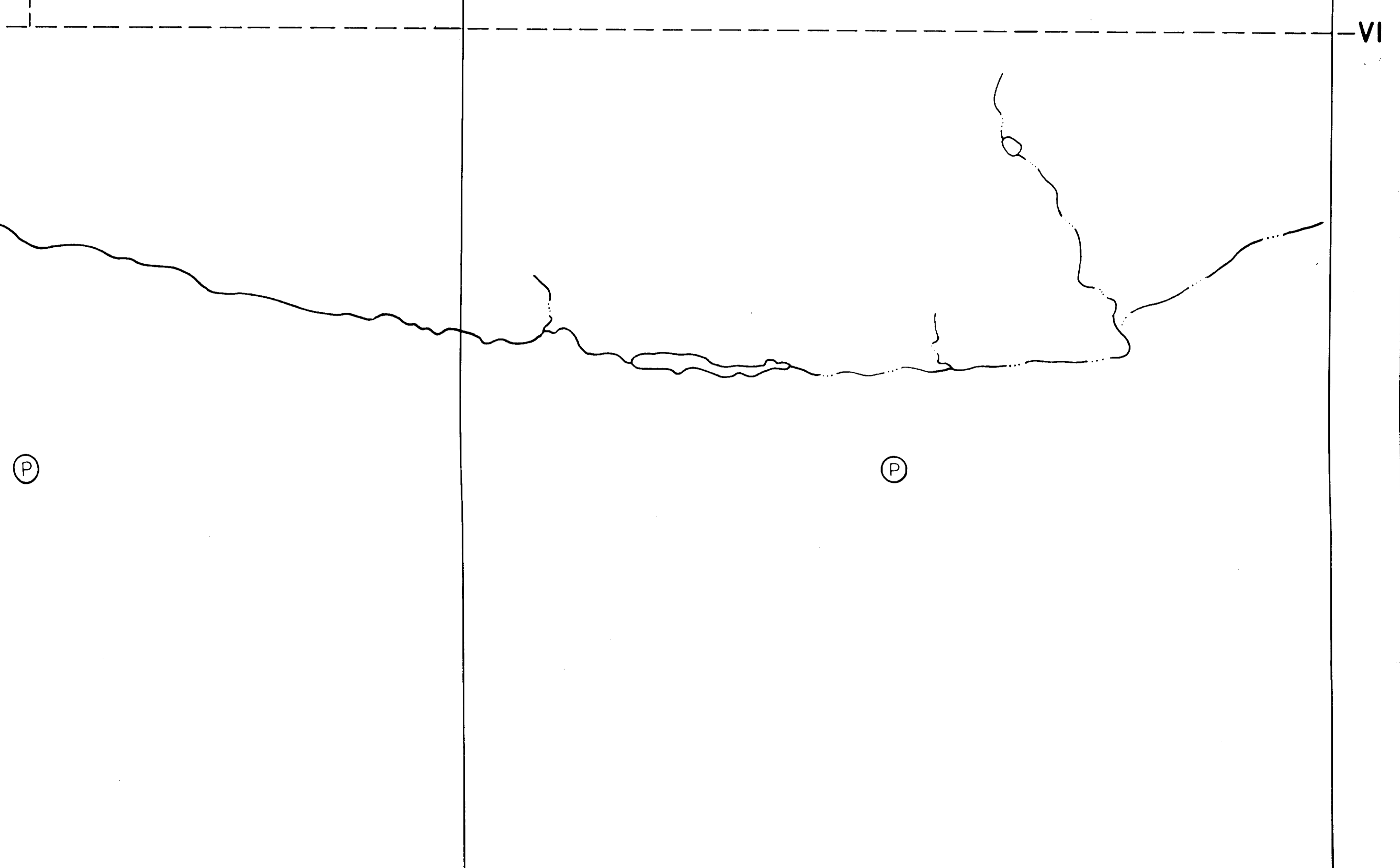
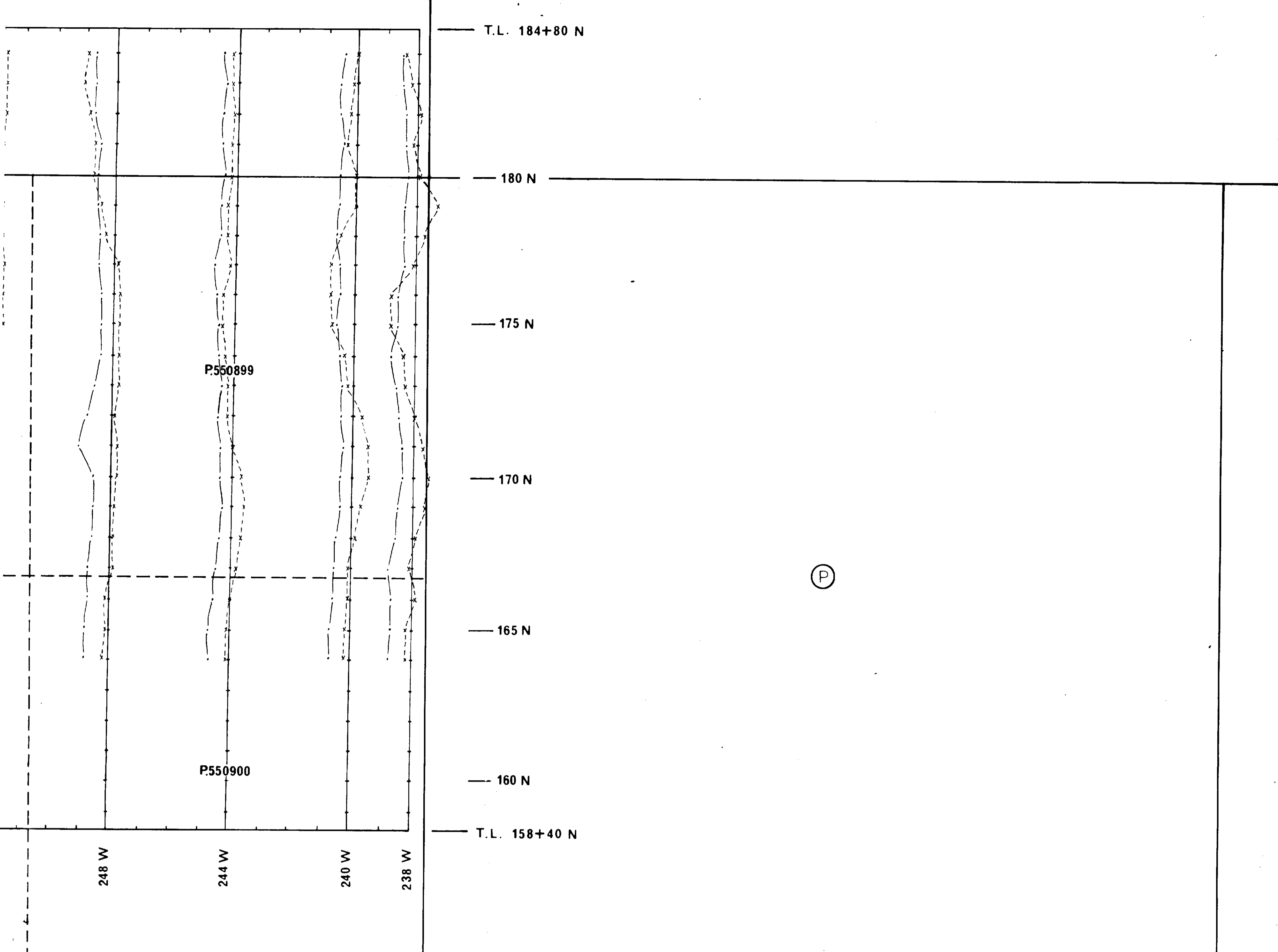
ROSARIO RESOURCES CANADA LTD.	
CARNEGIE TWP.	
MAXMIN II EM	444 Hz
OPER. : GEOEX LTD.	INST. : Apex Parametrics MaxMin II
SCALE : 1" = 200'	DATE : OCT. - NOV. 1980



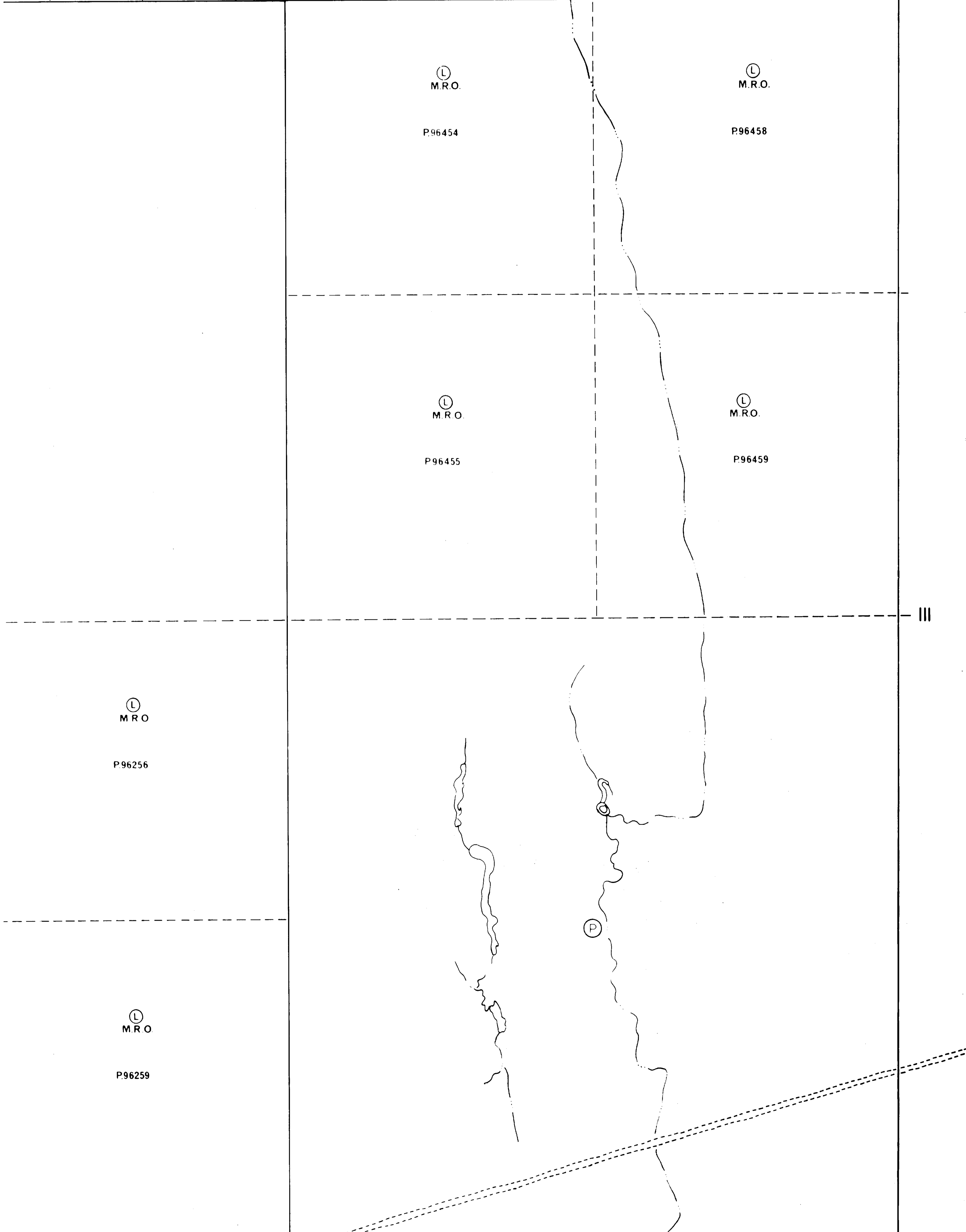
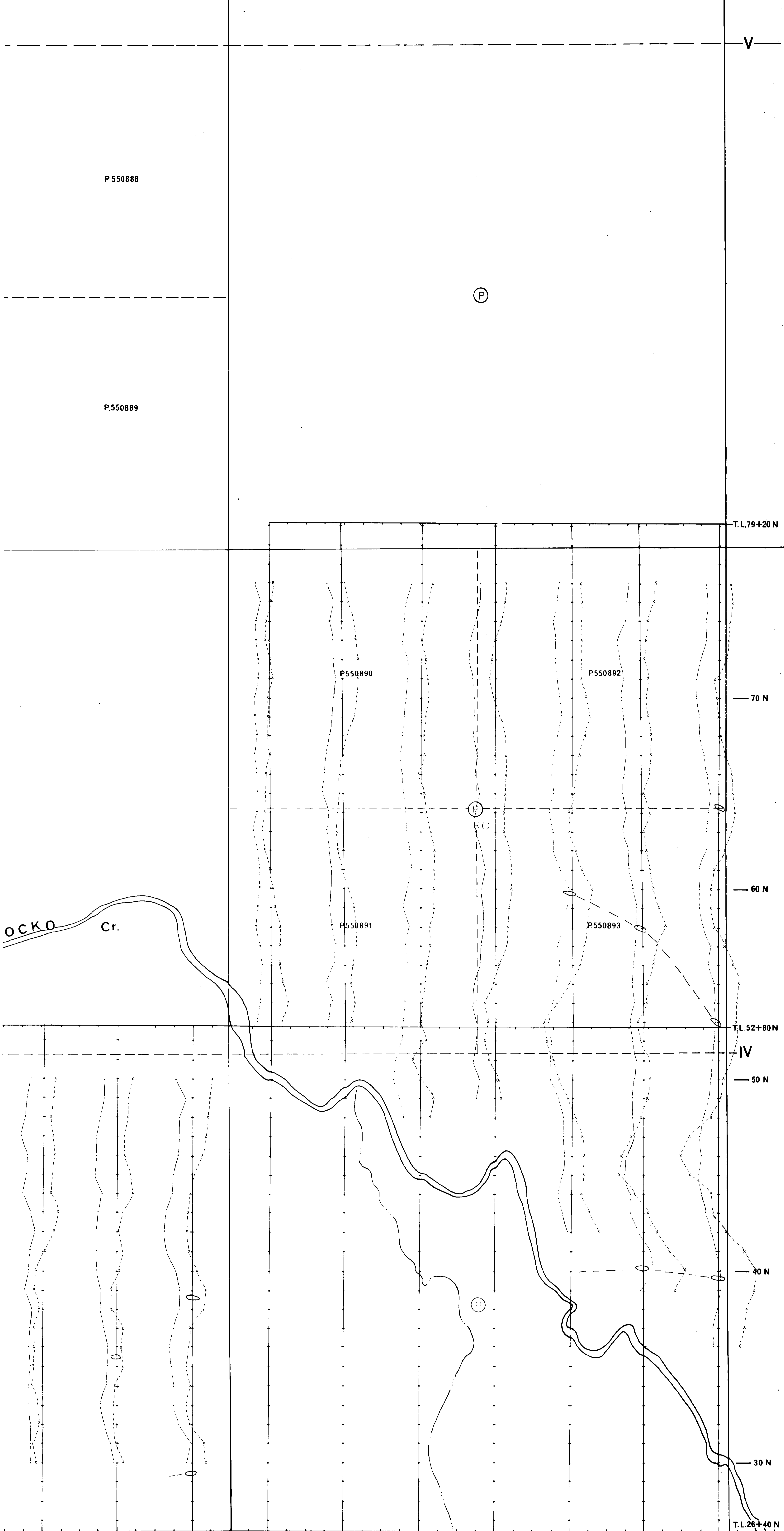
11

R. Middleton

ROSARIO RESOURCES CANADA LTD.	
CARNEGIE & REID TWPS.	
MAXMIN II EM 444 Hz	
OPER. : GEFEX LTD.	INST. : Apex Parametrics MaxMin II
SCALE : 1" = 200'	DATE : SEPT-OCT. 1980

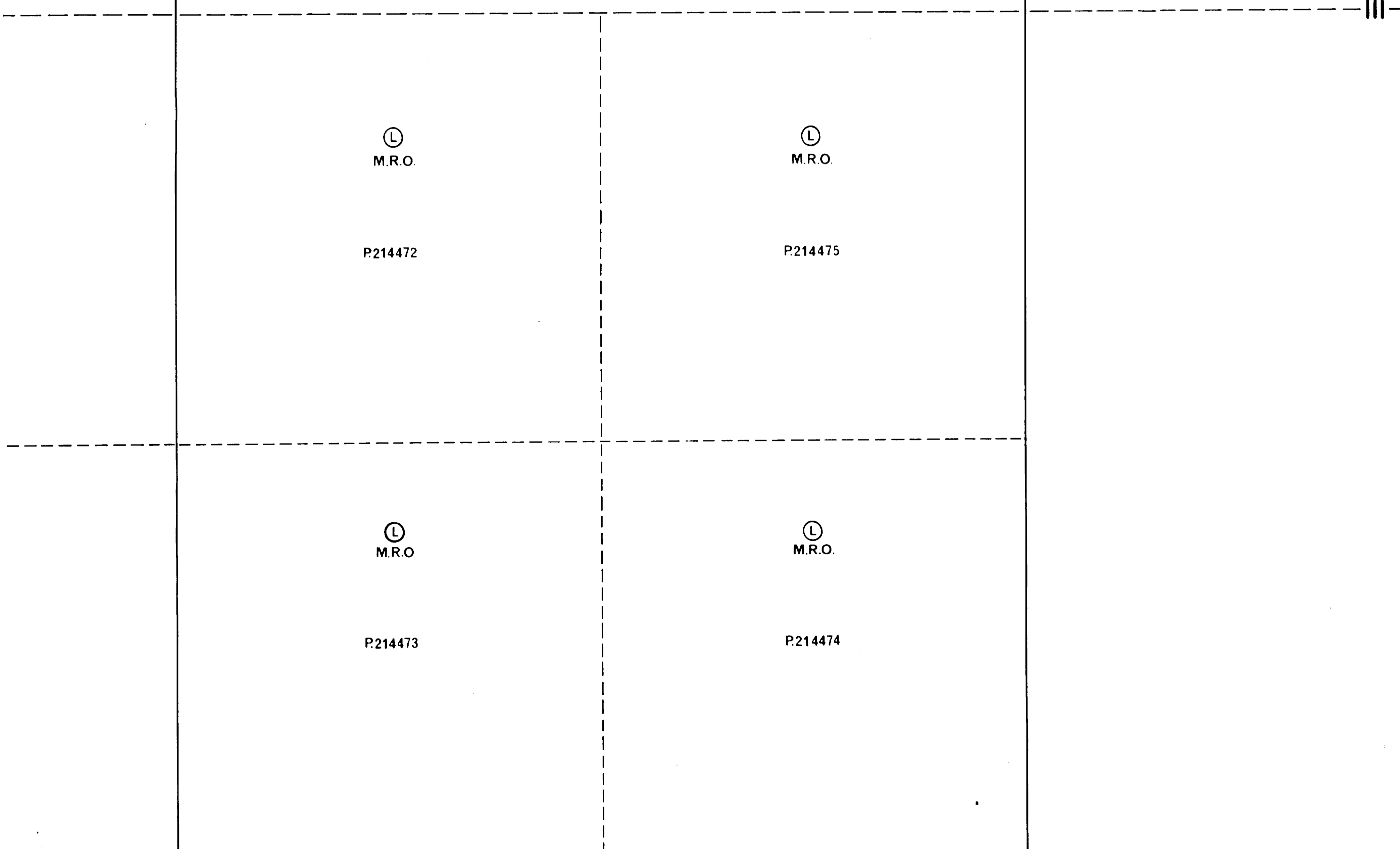
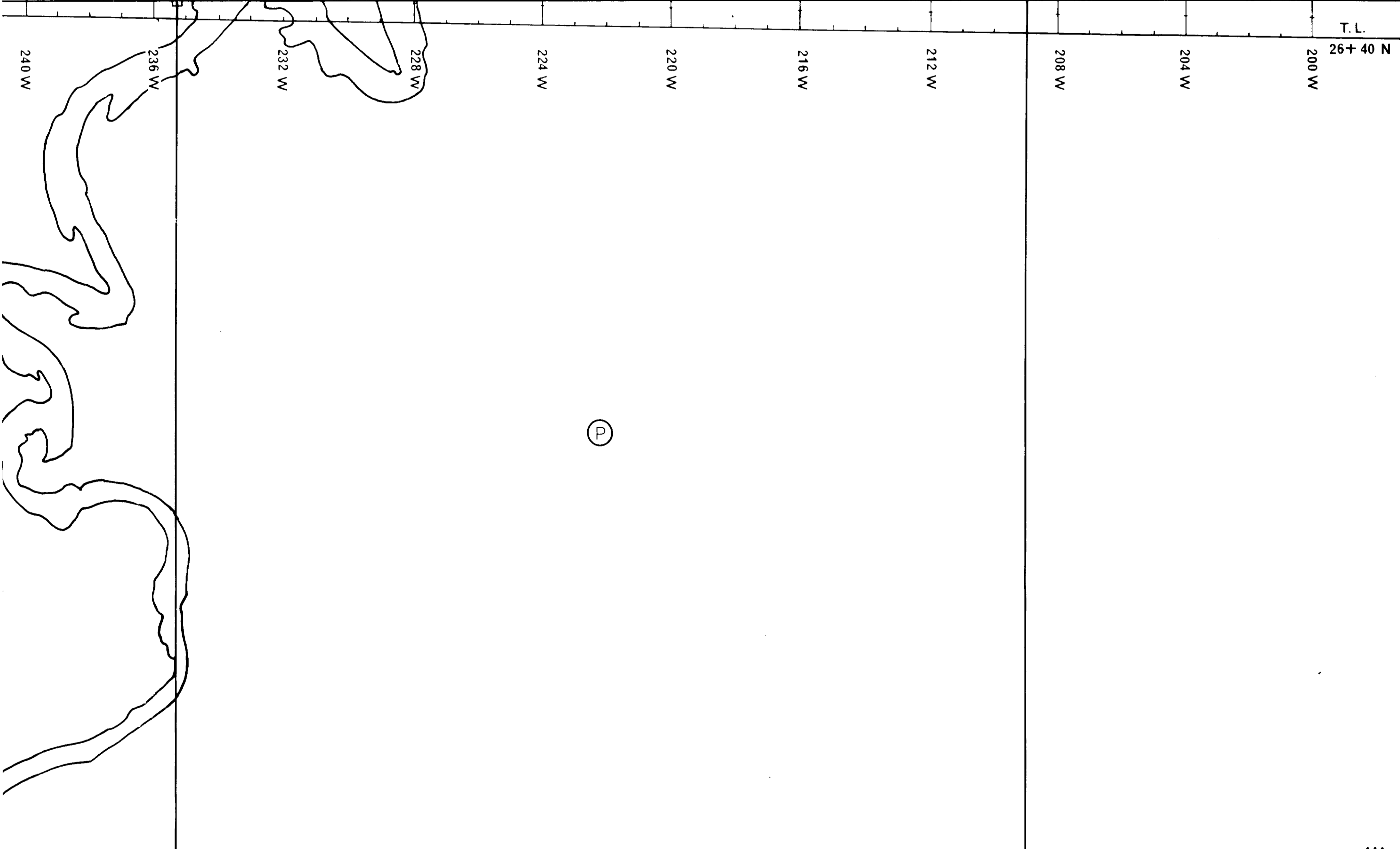
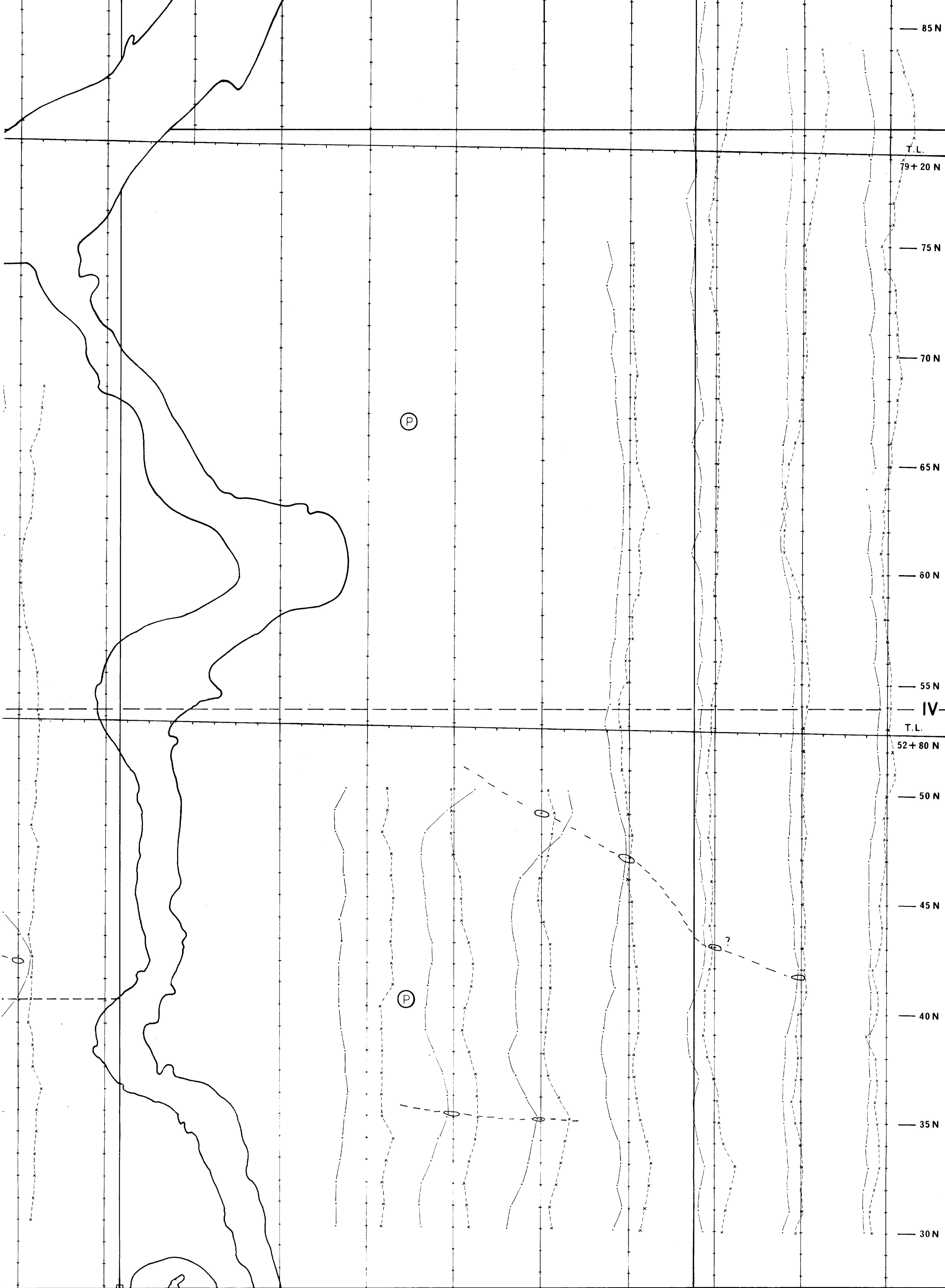


ROSARIO RESOURCES CANADA LTD.	
CARNEGIE & REID TWPS.	
MAXMIN II EM 444 Hz	20015
OPER. : GEOEX LTD.	INST. : Apex Parametrics MaxMin II
SCALE : 1" = 200'	DATE : OCT. - NOV. 1980



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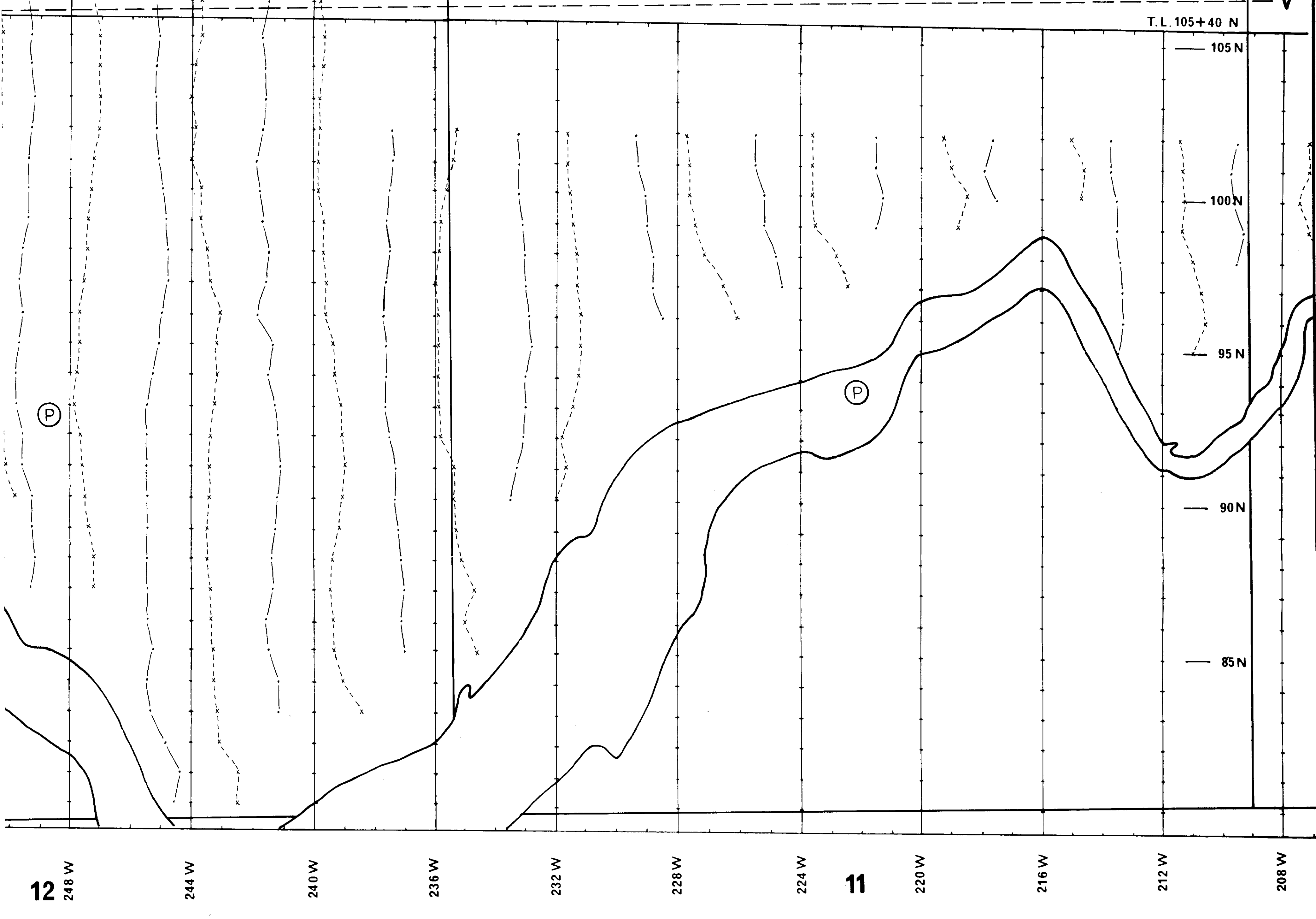
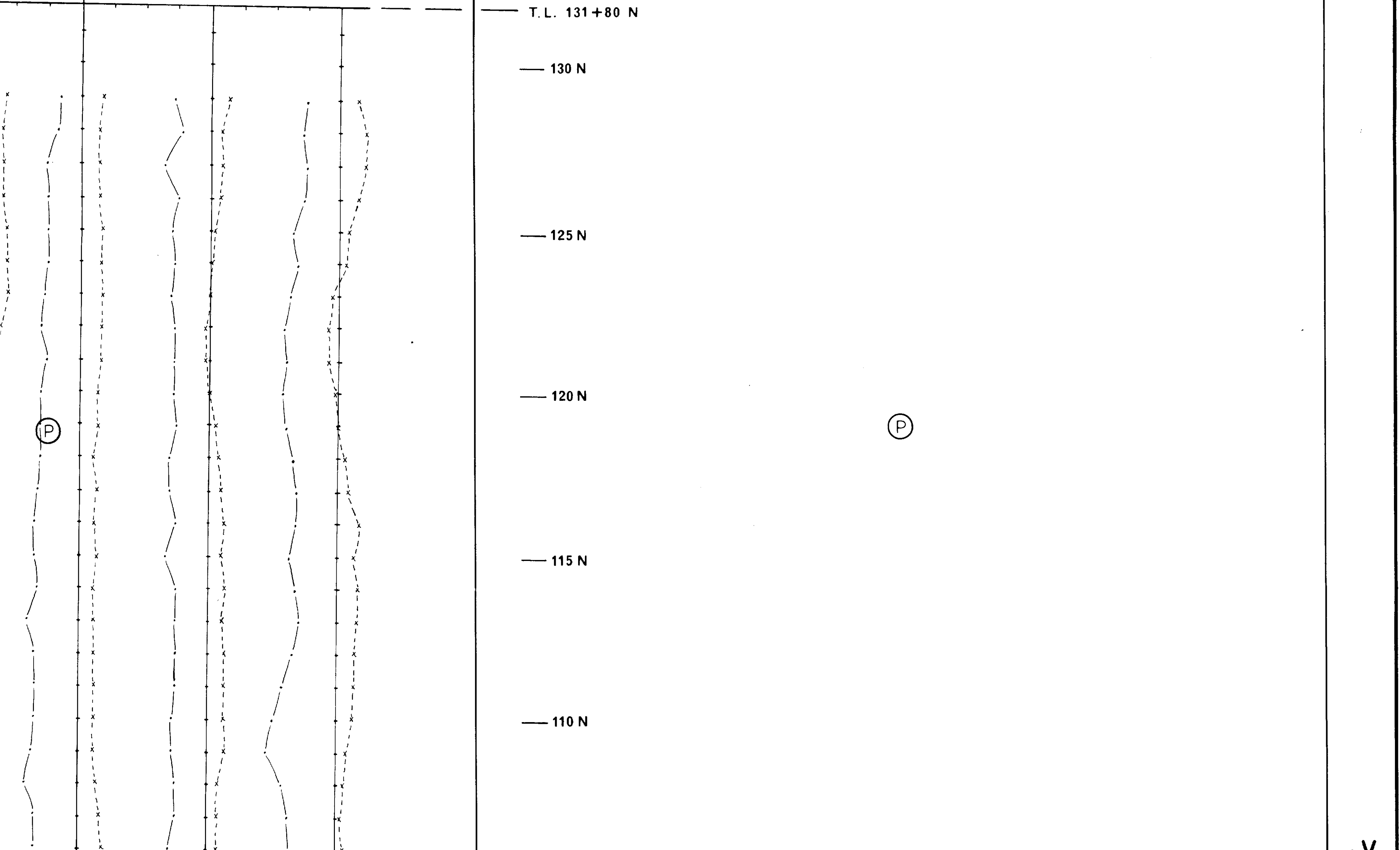
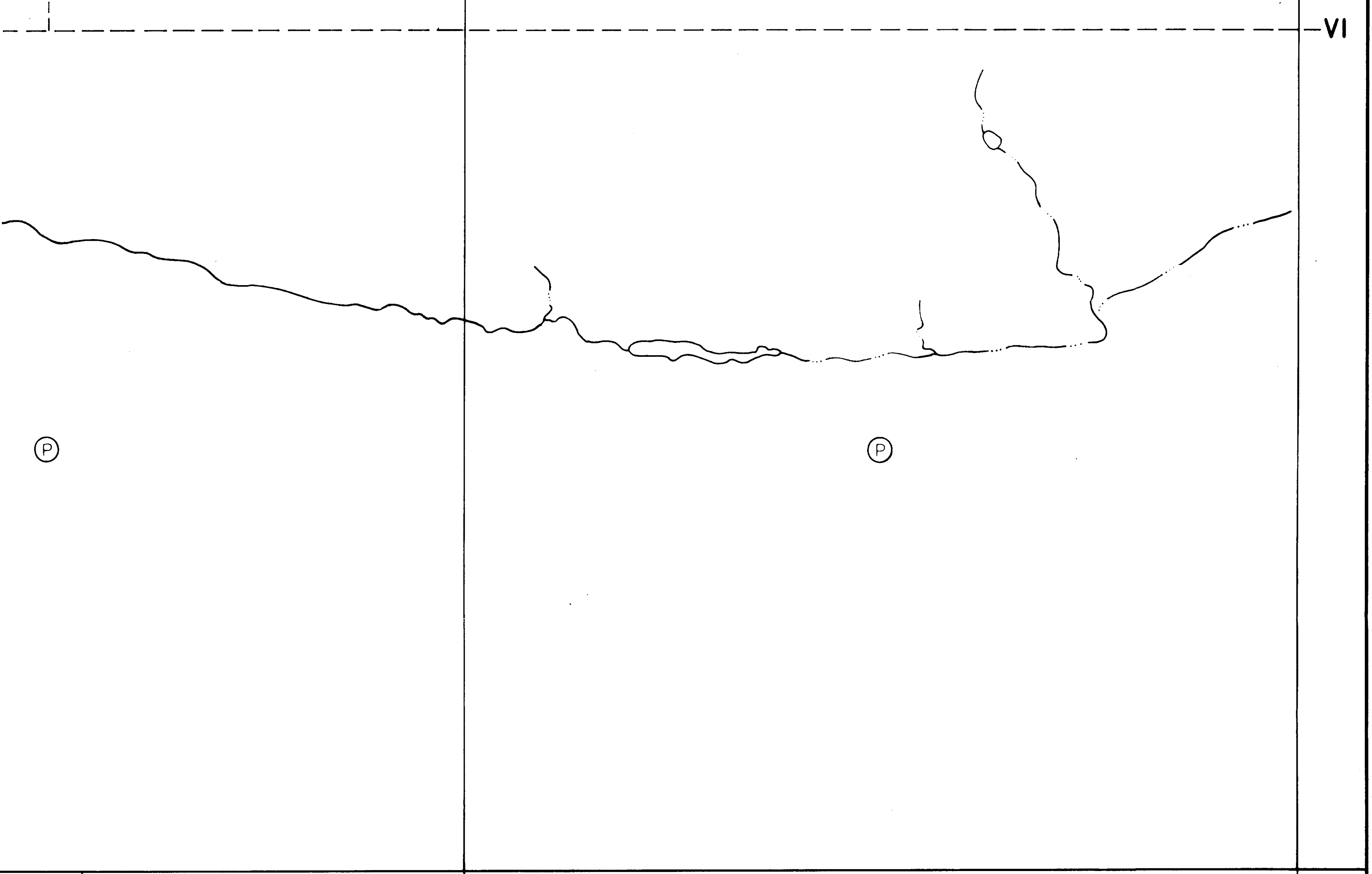
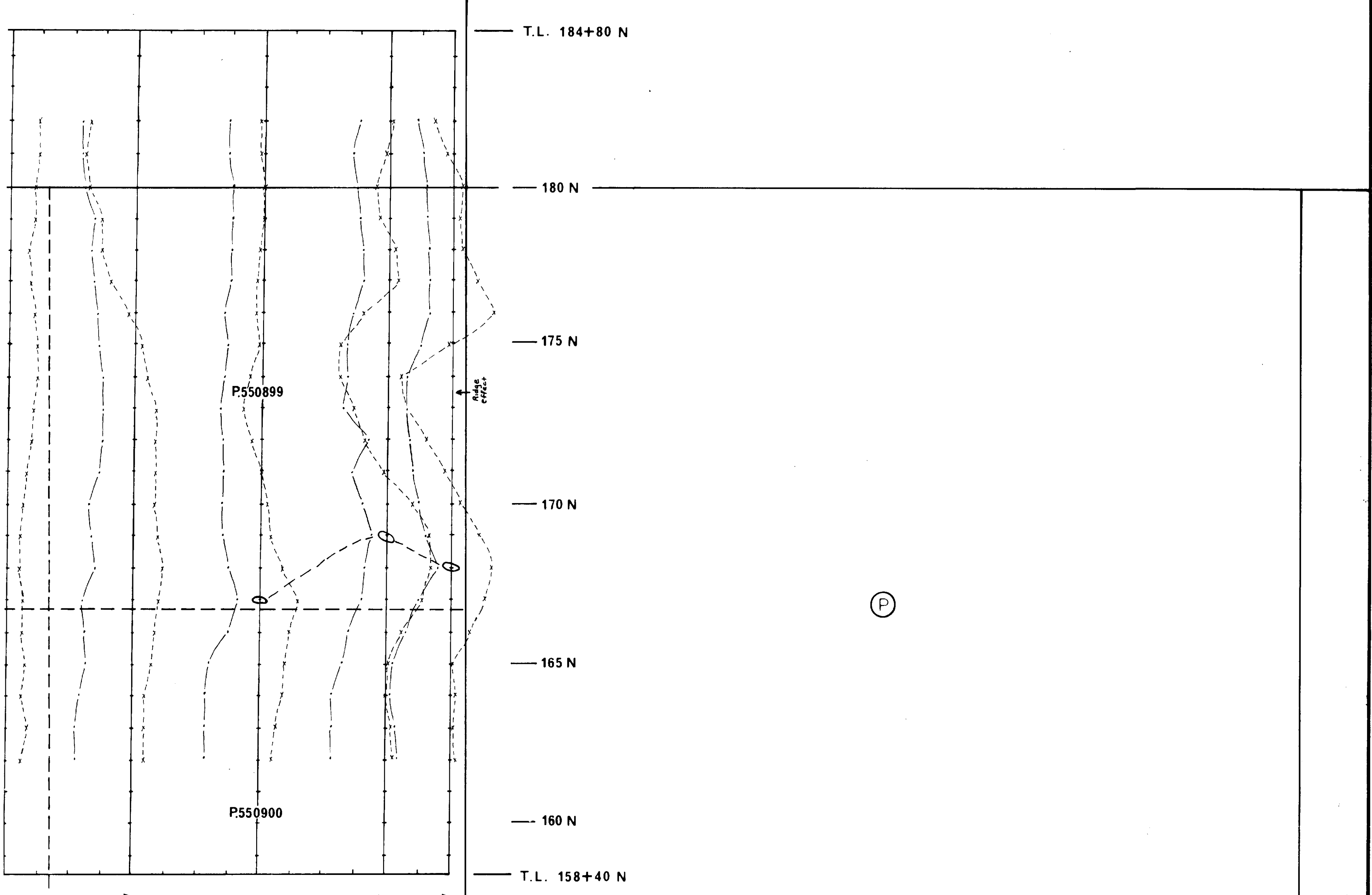
ROSARIO RESOURCES CANADA LTD.	
CARNEGIE TWP.	
OPER : GEOEX LTD.	INST. : Apex Parametrics MaxMin II
SCALE : 1" = 200'	DATE : OCT. - NOV. 1980



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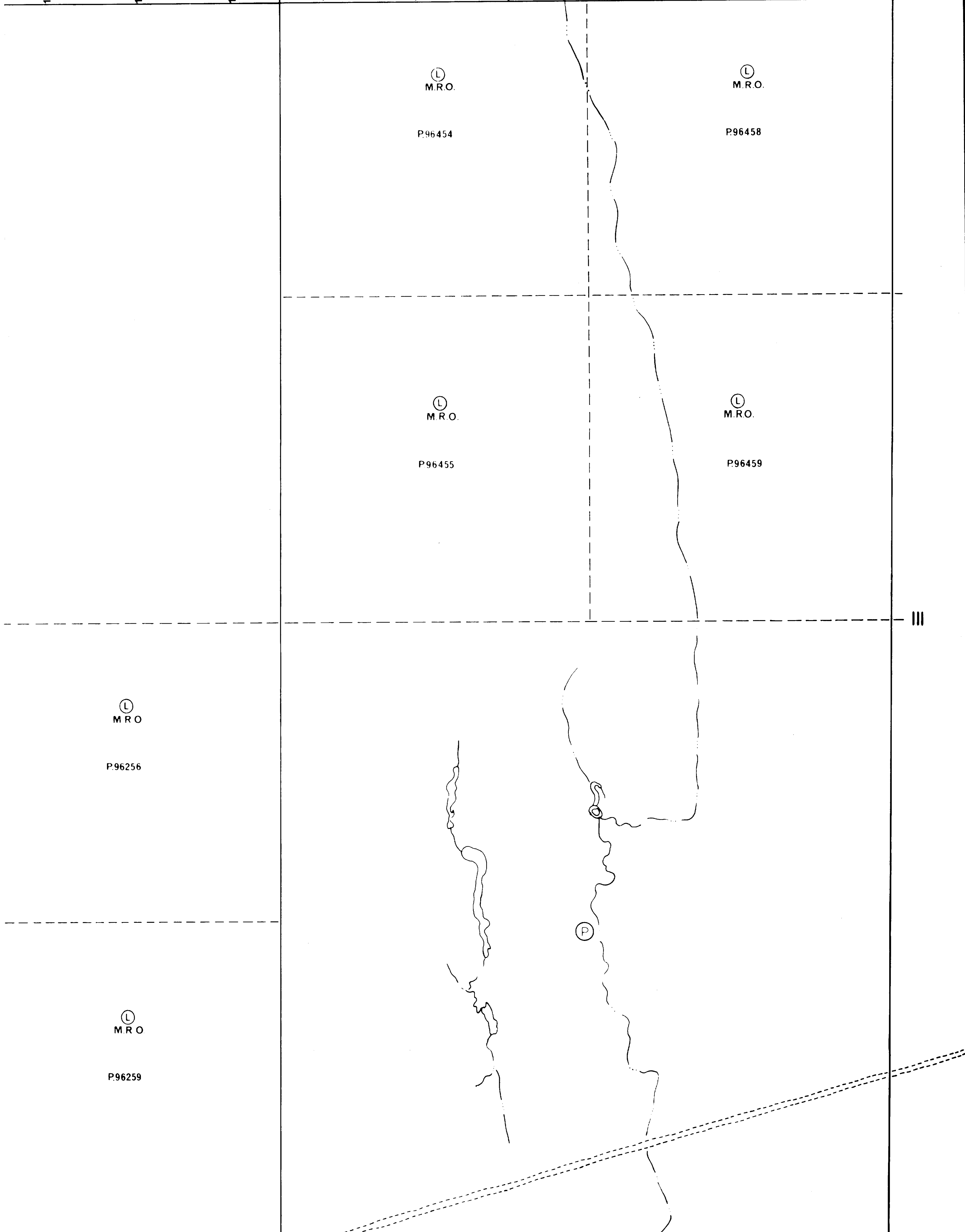
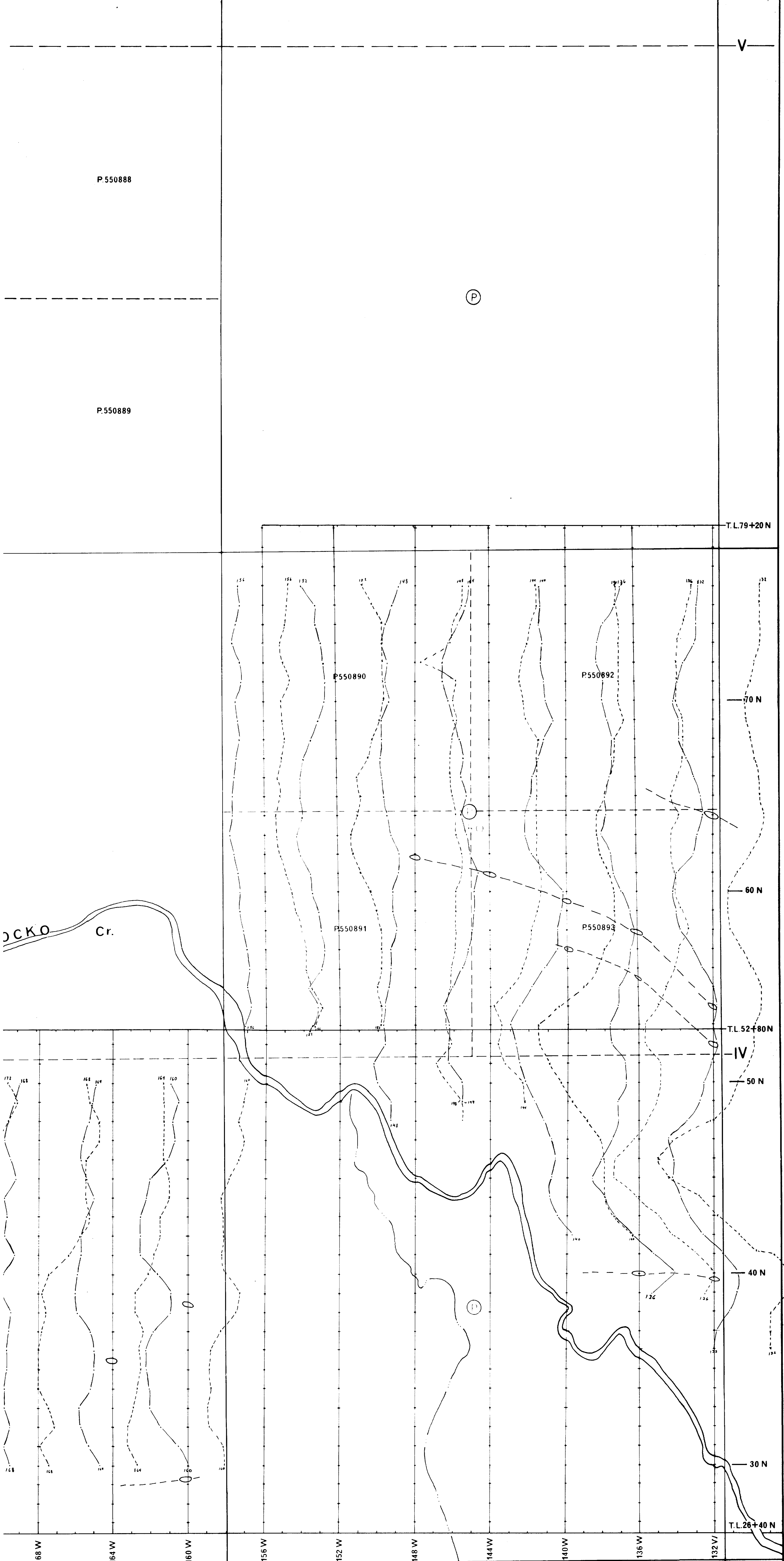
R. Middleton

ROSARIO RESOURCES CANADA LTD.	
CARNEGIE & REID TWPS.	
MAXMIN II EM 898 Hz	
OPER. : GEOEX LTD.	INST. : Apex Parametrics MaxMin II
SCALE : 1" = 200'	DATE : SEPT-OCT. 1980



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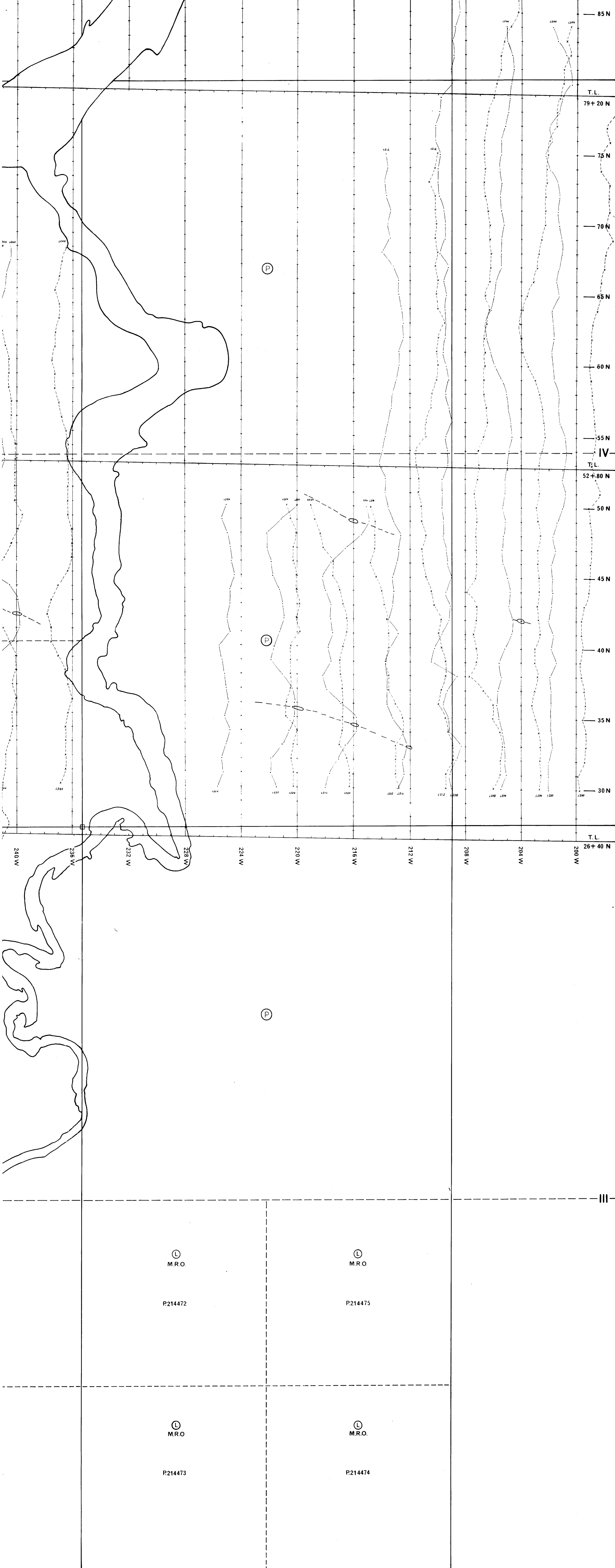
ROSARIO RESOURCES CANADA LTD.	
CARNEGIE & REID TWPS.	
MAXMIN II EM 888 Hz	2.35%
OPER. : GEOEX LTD.	INST. : Apex Parametrics MaxMin II
SCALE : 1" = 200'	DATE : OCT. - NOV. 1980



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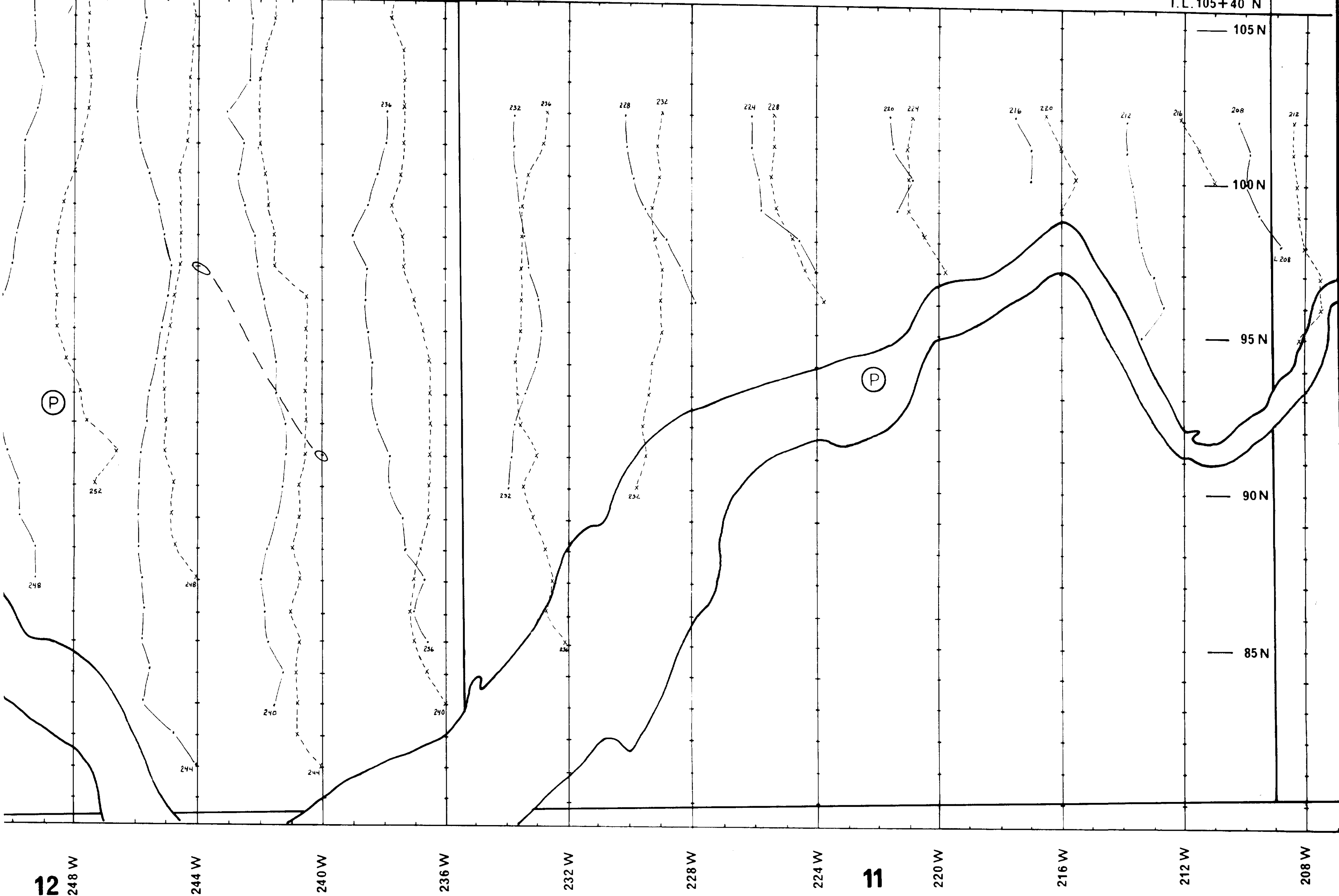
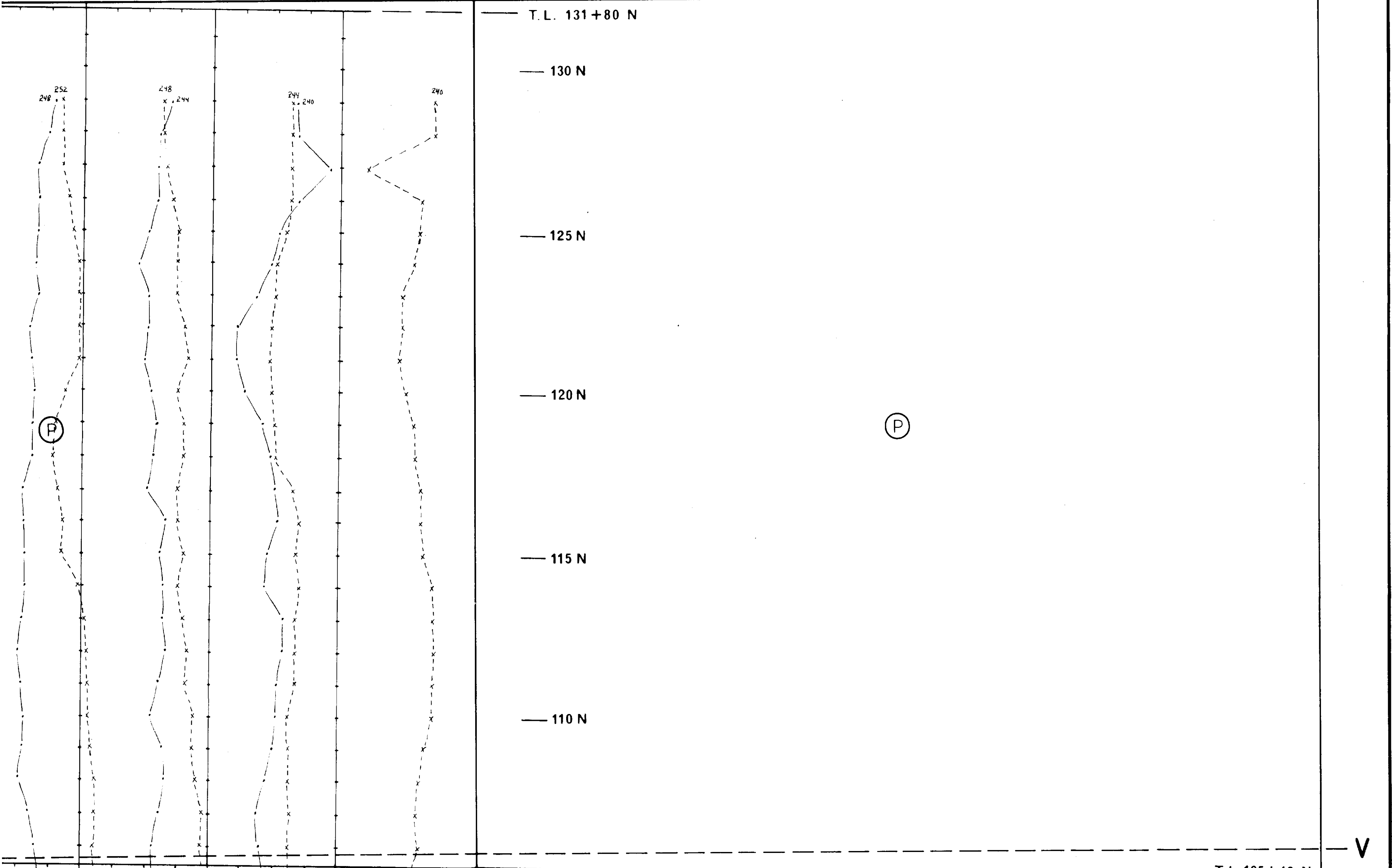
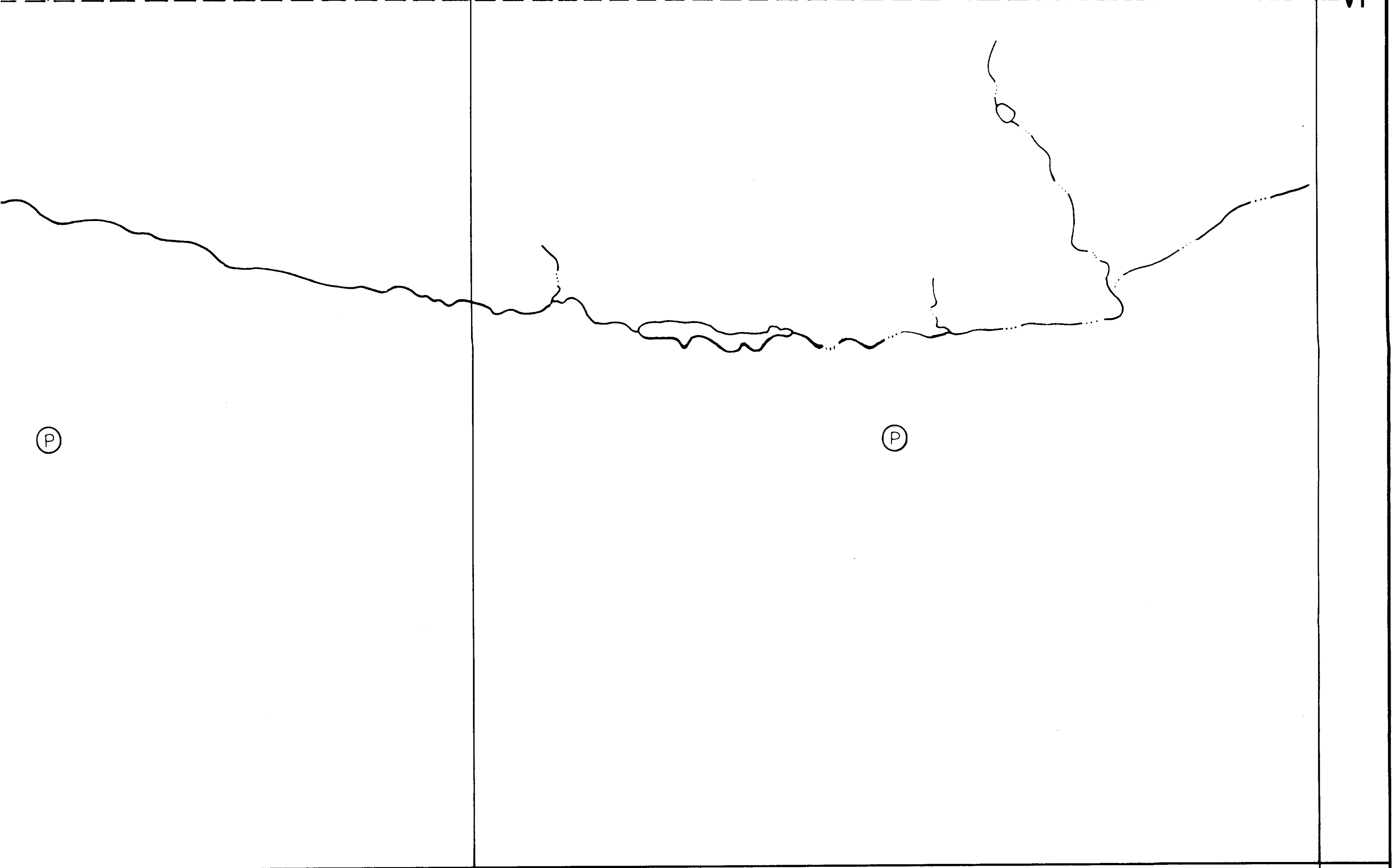
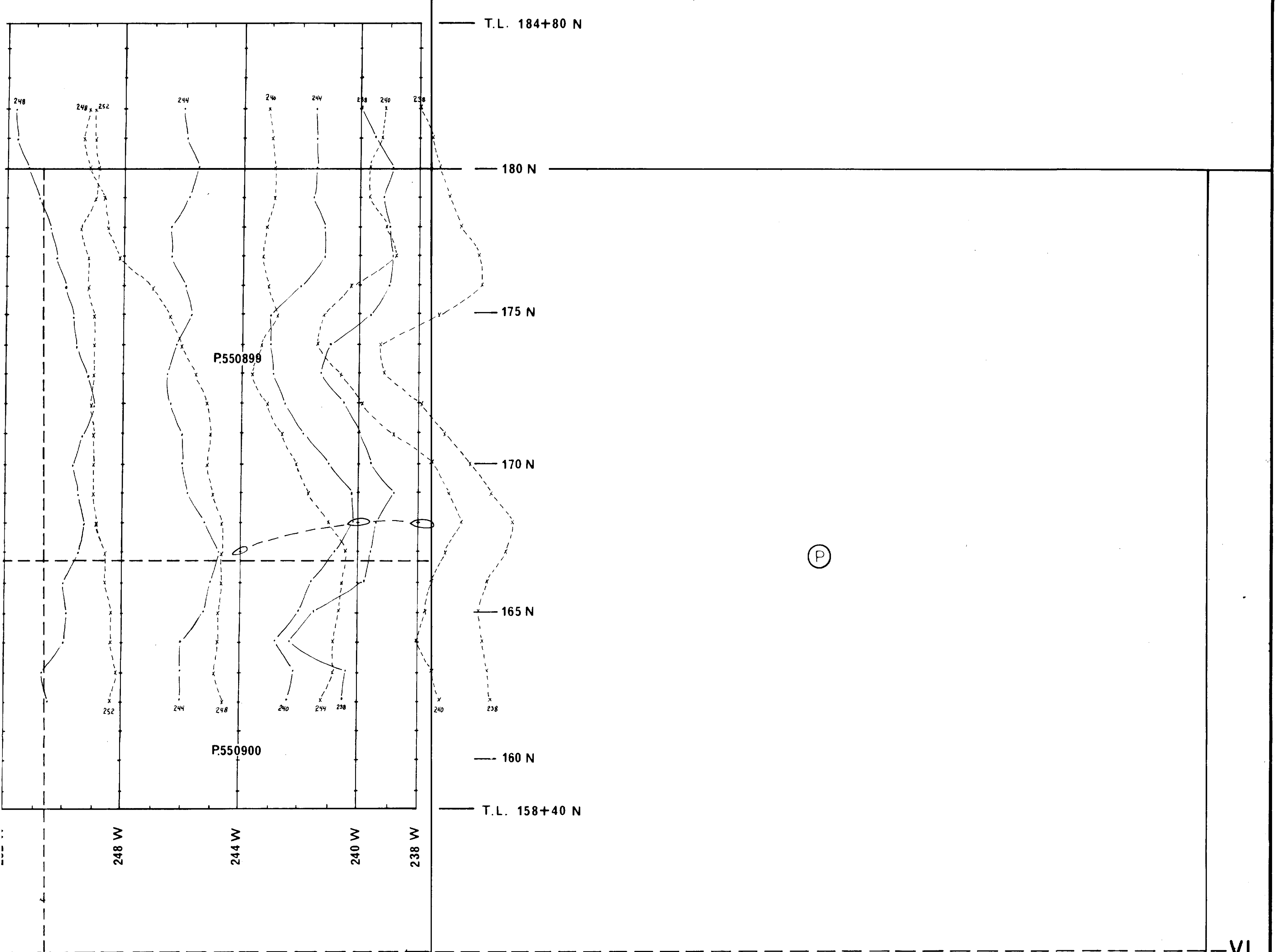
R. Middleton

ROSARIO RESOURCES CANADA LTD.	
CARNEGIE TWP.	
MAXMIN II EM	1777 Hz
OPER. GEOEX LTD.	INST. Apex Parametrics MaxMin II
SCALE: 1" = 200'	DATE: OCT. - NOV. 1980



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ROSARIO RESOURCES CANADA LTD.	
CARNEGIE & REID TWPS.	
PROJECT: EM 1777 HL 23673	
OPER: GEOEX LTD.	INST: Apex Parametrics MaxMin II
SCALE: 1" = 200'	DATE: SEPT-OCT. 1980



R. M. Dalton

ROSARIO RESOURCES CANADA LTD.	
CARNEGIE & REID TWPS.	
MAXMIN II EM	1777 Hz 2.3696
OPER. : GEOEX LTD.	INST. : Apex Parametrics MaxMin II
SCALE : 1" = 200'	DATE : OCT. - NOV. 1980